

Private Land, Public Interest:
Small Town Meets Big Dairy

by

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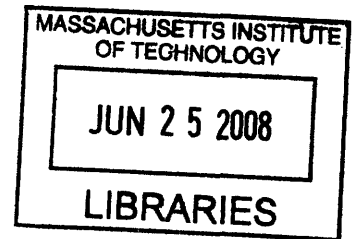
Submitted to the Department of Urban Studies and Planning
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May 22, 2008

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ABSTRACT

This paper examines a grassroots effort undertaken by local residents of the communities of Nora and Warren in northwest Illinois in their attempt to prohibit the construction of a Concentrated Animal Feeding Operation (CAFO) in their county. In particular, it is an attempt to understand and document the process by which a sparsely-populated rural community organizes itself in an attempt to disallow this type of facility from being sited in their area. Like poor urban communities, poor rural communities have found themselves the recipients of the wastes that are unwanted by larger, wealthier, politically powerful communities. Unique to rural communities, however, are the environmental and social impacts which transpire as a result of agricultural industrialization and specifically the siting of CAFOs. The objective of this research is to: 1) identify various members of the community who are working to oppose or support the dairy, 2) determine in what way these individuals have responded to this proposal, 3) construct a narrative of their individual viewpoints and concerns pertaining to the dairy, 4) explore their motivation for supporting or opposing the facility, and 5) investigate the political underpinnings and the state and federal agricultural regulations which despite successful community organizing to oppose the dairy, disallow any meaningful political voice for these residents.

Thesis Supervisor: J. Phillip Thompson
Title: Associate Professor of Urban Politics

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My deepest thanks are to my husband, our children, and my parents. My family and my friends have supported me and cheered me on throughout this process. They have tolerated my long absences, and the pandemonium which sometimes results from this.

In particular, I would like to say how grateful I am to our children, Edward and Grace, for their love and patience.

May, 2008



SUMMARY

This paper examines a grassroots effort undertaken by local residents of the communities of Nora and Warren in northern Illinois in their attempt to prohibit the construction of a Concentrated Animal Feeding Operation (CAFO) in their county. A great deal of research and writing has focused on the post-installation effects of CAFOs on communities, including efforts made by communities to have CAFOs in their areas regulated more stringently or shut down altogether. Rather than an “after-the-fact” analysis, this research is directed toward the collection of data and information within a community *prior* to the approval of an application. In particular, it is an attempt to understand and document the process by which a sparsely-populated rural community organizes itself in an attempt to disallow this type of facility from being sited in their area.

In exploring this issue, I used a two-pronged approach to collecting data. First, I researched the relevant scientific, legal, and demographic information. Second, I conducted targeted interviews with key figures in the dispute, including: community representatives; public health experts and legal council with highly specific CAFO expertise; local elected officials; State of Illinois employees from a variety of offices; private consultants; and, industrial agriculture. It is my intention that the information collected will provide a chronicle of the many different points of view of those affected – for better or for worse – by the construction of an industrial livestock facility in a tiny town in Jo Daviess County, Illinois.¹

¹ The author expressly declined to address the issue of animal rights or animal cruelty in this paper.

Overview:

The disproportionate burden of pollution on the poor is a fundamental characteristic of environmental injustice, one which is conventionally coupled with images of large cities, skyscrapers, sewage plants and trash incinerators. In comparison are the iconic landscapes of rural America; a vision awash in robust health of amber waves of grain rising from uncontaminated soils and sparkling water. In reality, like poor urban communities, poor rural communities have become a casualty of the garbage wars and over the years have found themselves the recipients of the wastes that are unwanted by larger, wealthier, politically powerful communities.²

Unique to rural communities, however, are the environmental and social impacts which transpire as a result of agricultural industrialization and specifically the siting of CAFOs³. Traditionally, livestock and dairy production was dispersed throughout rural areas, and was an agricultural system comprised of independent farmers. Over a handful of decades these independent farms have been reconfigured into highly specialized

² Wilson, Sacoby, et al.; *Environmental Health Perspectives* 110(suppl 2) :195-201 (2002) .

³ The United States Environmental Protection Agency (U.S. EPA) defines CAFO as an animal feeding operation (AFO) with more than 1000 animal units (AU) confined at a lot or facility where: (1) animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in a 12-month period; and (2) where crops, vegetation, forage growth, or post harvest residues are not sustained in the normal growing season over any portion of the lot or facility. An AU is equal to approximately one beef cow. Therefore, 1,000 beef cows equal 1,000 AU. There are multipliers for other types of animal feeding operations. The U.S. EPA Clean Water Act (CWA) defines CAFOs as specific point sources which are required to secure a National Pollution Discharge Elimination System permit.

business enterprises⁴, vertically integrated into large-scale agribusinesses controlled by a handful of corporate entities.⁵

These intensive livestock production facilities confine animals, frequently numbering in the thousands, in closed ventilated buildings. The animal pens are designed with slotted floors to allow urine and feces to fall into a pit below. The vast amounts of animal waste⁶ are collected, pumped out, and stored through different systems, commonly including below-floor slurry storage (deep pit), underground slurry storage, anaerobic lagoons, and oxidation pits.⁷ One of the most common methods of storage is the retention of the animal waste in anaerobic cesspools (commonly referred to as ‘lagoons’) where it undergoes anaerobic microbial digestion and decomposition. The quantities of liquefied manure which are stored often amount to millions of gallons. The resultant effluent is later emptied, usually on an annual basis, and disposed of onto spray-fields or otherwise trucked off-site.

Public health concerns, ubiquitous in any environmental justice discourse, are present here as well. Like their urban counterparts, poor rural communities also lack access to medical care, have a higher incidence of disease, diminished nutritional options, and suffer from equivalent low wages. Airborne contaminants from these confinement facilities, lagoons, and fields which are recipients of the fertilizer spray include ammonia, endotoxins, dust, hydrogen sulfide, and myriad volatile organic compounds. These

⁴ For example, hog CAFOs have grown exponentially. In North Carolina alone, between 1992 and 2002 the number of swine CAFOs grew from 0 to 60. (Wilson, 2002) In Illinois, the number of swine raised in CAFOs larger than 1000 animals grew almost 13% between 1997 and 2005. (Lant)

⁵ Morrison J. The poultry industry: a view of the swine industry's future? In: Pigs, Profits, and Rural Communities (Thu K, Durrenberger E, eds). Albany, NY:State University of New York Press, 1998;145-153.

⁶ Animal waste produced from these types of facilities contains highly concentrated levels of nitrogen, phosphorus, heavy metals, hormones, pathogens, ammonia, and antibiotics. (USDA and Danielle's note)

⁷ 10. U.S. EPA. Feedlot Industry Sector Profile Revised Draft Report. Washington, DC:U.S. Environmental Protection Agency, 1998.

facilities – and their waste pits – are found in rural areas which often are not served by municipal water treatment facilities, and therefore have a population wholly dependent on well water. Moreover, these rural wells are commonly quite old, shallow, and unlined, offering very little protection from ground water contamination.⁸ These lagoons frequently leak and over-spraying of fields is also a frequent occurrence. This results in ground and surface water pollution, which can be devastating to human, animal, and aquatic life.⁹

In November 2007, an application was filed with the State of Illinois by Mr. A.J. Bos of Bakersfield, California, for the construction of a large dairy operation to be built in Nora, Illinois. If built, the Tradition Family Dairy will be located within the town of Nora, Illinois, adjacent to the town of Warren, in the uppermost corner of northwest Illinois. This research focuses on the local response of these two communities to this application, and the grassroots efforts they've made to respond to the risk of environmental damage which may possibly be caused by the installation of a CAFO in their community. It is the examination of efforts of opposition by local residents and community groups, as well as the response to these efforts by other forces within the area, including those of local political and industry officials.

The objective of this research is to: 1) identify various members of the community who are working to oppose or support the dairy, 2) determine in what way these individuals have responded to this proposal, 3) construct a narrative of their individual viewpoints and concerns pertaining to the dairy, 4) explore their motivation for

⁸ Wing hog again and Airborne contaminants from these confinement facilities, lagoons, and fields which are recipients of the fertilizer spray include ammonia, dust, hydrogen sulfide, and methane gas. There are another 160 identifiable toxins in cow manure

⁹ USEPA, Environmental Impacts of Animal Feeding Operations 1998:2.2; Washington, D.C.

supporting or opposing the facility, and 5) investigate the political underpinnings and the state and federal agricultural regulations which despite successful community organizing to oppose the dairy, disallow any meaningful political voice for these residents.

THE LANDSCAPE

Welcome to Jo Daviess County:

The towns of Warren and Nora, Illinois are on the western side of Jo Daviess¹⁰ County, on the far northwest edge of Illinois, where the state meets Iowa and Wisconsin, along the Mississippi River. A small creek a little south of the county seat is called Small Pox Creek, so named by Native Americans who traveled east and on their return brought with them a disease that they named *Maucaubee*; the fever that blistered. Later a frontier town known as the “Fever River Settlement” was built, and in 1827 it was renamed Galena. Galena would be made rich by the vast amount of lead ore that lay underneath it. In 1849 boasting a population of 14,000, Galena served as the largest Mississippi River port between St. Louis and St. Paul. By 1900, bypassed by the railroad and unnavigable any longer to steamboats because of “silting in” of the river, Galena – now the County Seat - had become the middle of nowhere. Today its population has dwindled to less than 3500 people.

The end of the Black Hawk War in 1832 opened Illinois for settlement. Within five years stagecoach lines owned by misters Winters and Frink and Walker, respectively, were running in Jo Daviess County between the towns of Lena¹¹ and Galena. Fifteen years later, the arrival of the railroad brought an end to the stagecoach lines. This 40-mile stretch of historic road is still known as the Stagecoach Trail. One observer noted, “It’s easy to think the scene hasn’t changed much in the 160 years since it became a

¹⁰ The proper pronunciation for “Daviess” is “Davy’s.”

¹¹ Lena is approximately 130 miles northwest of Chicago.

stagecoach route.” If you drive this road today, it still curves along the edge of a ridge with endless views on either side, looking out over rolling hills and a scattering of farmhouses, like summertime freckles on the landscape.

The stagecoach route included the town of Nora, Illinois approximately nine miles west of Lena. In the 1870s Nora had a population of more than 1000 people, and supported its own blacksmith shop, post office, tobacco sheds, and much more. Today, Nora has a median household income of \$28,125 and a population of less than 120¹² people. The sole business remaining in the town of Nora, the fittingly named Nora Bar, can found at the intersection of Locust and South North Street.

Jo Daviess County was also, in its time, home to a successful farming community.

Fast Forward:

The 601 square miles that make up Jo Daviess County is home to about 22,500 people, with a median household income of \$43,500. The average cost of a home in the county is \$90,000, nearly 30% lower than the average for the State of Illinois.

If you are traveling west from Chicago, Jo Daviess County is the first “sign of life” in the topography of Illinois once you pass through the metro-area and the woefully horizontal landscape of its surrounding counties. Most of the drive between the city and Jo Daviess County is across flat, rigidly straight roads which were cut long ago through suburbs and farmland. Most of the farmland between the two points is gone now, having been swallowed by sprawl and a mind-boggling number of subdivisions over the last few

¹² The 2000 U.S. Census showed a population of 118 people.

years. Jo Daviess County is the first set of hills you'll see on the western route between Chicago and the border with Iowa. It is almost a topographical Narnia, flatland yielding to rolling hills and breathtaking views.

Perhaps thanks to the economic downward spiral at the end of the last century, the town of Galena once again finds itself to be a major driving force of the county's economy. Over the decades, Galena had no funding to raze old buildings or update them. The architecture has stood mostly untouched, freezing the town a century-long time warp, until it was "discovered" by vacationing Chicago-area tourists about 30 years ago. Now a thriving get-away spot, Galena, with its tiers of streets connected by steep stone stairways, bed and breakfasts, and high-end shops and restaurants draws thousands of visitors every year. The Northern Illinois Tourism Development Office reports that in 2006 alone, tourists in Jo Daviess County spent \$157m dollars, employed 1,720 people with a payroll of nearly \$34m dollars, and paid over \$12m in sales tax.

For well-heeled, well-moneyed Chicagoans, Galena and the area outside the town have quickly become one of the most desirable areas of the state in which to have a second home. Prices for these homes in the most sought-after areas of the county can easily exceed the million-dollar mark.

Awash in boutiques, wine bars, golf courses, equestrian centers, and luxury homes, Galena is an easy drive from Nora, less than 30 miles down County Road 3.

**The most important trip you may take in life
is meeting people halfway¹³**

A number of residents in Nora and Warren agreed to speak with me about the installation of the CAFO, and did so with amazing honesty, insight, forthrightness, and candor. In many cases the interviews lasted several hours. Despite the fact that these conversations were, in more than one instance, intensely personal to the interviewee, I have come to think of these men and women as “The Everyones.” They are the voices and faces of residents of communities throughout rural America who are facing industrialized agriculture.

In and of itself, the CAFO in Nora is not unique or special. It’s an industrial installation like countless others which have been or will be built in small, poor, rural areas of the country. In the expansive debate about rural poverty, environmental injustice, consolidation of farming in the nation, and the ongoing environmental impacts of “big agriculture,” it is easy to forget that there are real people caught in this fray. The people with whom I spoke - The Everyones - give faces and names to the anonymity of statistics and the data; they give a voice to the concerns and questions of communities like theirs.

¹³ Attributed to Henry Boye

Who are the people in your neighborhood?¹⁴

Kathy:

Kathy, 45, has lived in Warren all her life. She married Todd when she was 25. A year later Kathy was diagnosed with breast cancer; she has since had two recurrences. As a result of her cancer, she and her husband are childless. Kathy's family has lived in Warren for over 100 years; Todd's family has been there for at least 70 years. He grew up in Warren, just down the road from where they live now. Right after they were married, before her first diagnosis, Kathy and Todd bought a house just outside of town.

The house and property Kathy and Todd bought had been sectioned off of the adjoining farm, which belonged to Mr. Williams; his hired hand had lived in the house for over 30 years, and Mr. Williams had actually been intending to bulldoze it. Over the years that followed, Mr. Williams sold off additional parcels of property, but retained the main agricultural farm on which he grew crops. Eventually, Mr. Williams put the rest of his land – about 1400 acres – up for sale.

Kathy's mother-in-law, Janet, lives right down the road from her son and daughter-in-law, just past the Williams farm, still in the house that Todd grew up in. Late in the summer of 2007 Kathy was outside doing yard work, when Janet stopped in and told Kathy that the Williams property had been sold. Moreover, she let her daughter-in-law know that she had been approached about selling her property by the same man who'd bought the Williams place.

¹⁴ Original musical rendition performed by "Bob," on Sesame Street, a production of the Children's Televisions Workshop, courtesy of PBS.

His name was A.J. Bos, and he was planning to build a dairy.

When you consider that adjoining farm properties can be comprised of hundred of acres, having a house “right next door” may actually be quite a bit away. Not so in Kathy’s case: she is 2,430 feet away from where Tradition Family Dairy plans to build their manure lagoons. Her home is within feet of this installation, and not just from her property line; the 2,430 feet starts – literally - at Kathy and Todd’s back door. Supporters of the dairy have dismissed community opposition to the facility as the NIMBY syndrome. It’s easy to brush off concerns like Kathy’s when you won’t be right on top of the dairy. However, as the person who will have this facility, literally in her backyard, Kathy sees the trivializing moniker as unfair; she takes the name-calling very personally.

In the 20 years that they’ve owned their property, Todd and Kathy have remodeled their house from top to bottom; she laughs and points out that it didn’t even have basement windows when they bought it, although it did have a furnace which is still going strong. Kathy describes herself as a person who does “everything outdoors, from snowmobiling to four-wheeler riding to paddle boating to hanging out clothes to mowing. Flying kites with kids we know, picnicking, anything.” She sees the installation of the mega-dairy as changing her life completely. “It just sickens me. It’s not even here and I’m already scared of it. I wonder how I’m even going to be able to go outside and breathe.”

Kathy has a strong sense of herself – financially, physically, and emotionally – in her property; the house is something in which she and her husband are deeply invested. “We’ve made yards, I mean, actually had to *make* yards. We built a pond. Up in the back

field, there are 13 acres, we have sheep.” Kathy and Todd have removed barns, torn up foundations, and pulled out a chicken coop. “We’ve planted I don’t know how many trees. We put in a lot of trees along the fence lines, plus a whole grove of pine trees.” They have tiled part of the property and installed fenced perennial gardens. They built a backyard. Todd rented a bulldozer and tore out the old cistern himself. Except for the new roof and their new HVAC system, Kathy and Todd have done all the work on their home themselves, at times with help from each of their families. They have always made a point to buy all their materials locally, and to hire local contractors for the work they didn’t complete on their own. It has been their intention to live in this house through their retirement, and possibly forever. With the arrival of the dairy, all of this has changed.

Beverly:

In 1963, Beverly’s father started a business on the highway that runs through Warren. He passed away 20 years ago, but his daughter, Beverly, still runs the family business. Beverly and George, her husband of 36 years, actually live 10 miles east of Warren, in Winslow, but the dairy will be approximately two miles from their place of business. They each grew up in the area. In fact, Beverly’s father’s family farm is the last remaining farm in Stevenson County, which borders Jo Daviess. The farm holds some livestock, but is mostly cash crops. Beverly’s mother still owns the farm, and rents out the land.

Beverly’s interest in the dairy has a unique element. She is the Village Board President in Winslow, which has an artesian well. It is “a very, very small community¹⁵, but one of the claim to fame is the artesian well water,” she says. “People come from

¹⁵ As of the census of 2000, there were 345 people in Winslow.

Rockford -- they come from a long distance away, sometimes -- to get water.” When Beverly heard about the dairy, and learned that A.J. Bos would be pulling over a million gallons a day from the aquifer, she became concerned about what that type of deep drilling would do to the artesian in Winslow. “The first person I asked was a well driller -- and he said, ‘don’t be so concerned about the pull on the aquifer; be concerned about the *pollution* with the aquifer,’” She then sought a second opinion from another knowledgeable source, who basically said the same thing. “I thought, ‘my God,’ and asked him if that can really affect our water with that far away” His answer: “Definitely.”

Beverly has another specific concern, one which is shared by a number of local residents: she is in the process of building a 3200 square-foot house on her mother’s farm, in fact. “My husband’s worked for the last few years and he’s built a seven-acre pond out there with the hopes and the dreams that we’d build one off by the pond he had worked on. In fact it was this year that we were going to start to build a new home out there. We only have one child; she and her husband live in Iowa. She got pregnant with twins so we’ve been helping them out. We’ve built them a house instead of our own. So this would be the year that we’d be starting our *own* home.” What she has come to learn in her research about the dairy has brought their plans to a standstill. “I’m not going to invest a lot of money into a home and then not be able to sit outside. The farm is probably only two or three miles -- probably three miles, by the way the crow flies and stuff -- from the dairy.”

I asked Beverly about whether or not she planned to use local suppliers and labor for her new house. “Yes, they’ll come locally. We do HVAC here, as part of the business,

so we work with local builders; several contractors subcontract out to us. It would definitely be one of those contractors that would be building our home.”

Mike

The Illinois Smallmouth¹⁶ Alliance (ISA) was founded in 1994 by a group of committed anglers who were growing more and more concerned about the outlook for the smallmouth fishery in Illinois. This group of catch-and-release fishermen is now 500-strong, and works to preserve the smallmouth bass and its Illinois habitat through education and conservation. Mike Clifford has served as the Conservation Director for the ISA for over eight years. He and the organization are deeply concerned about the proposal to build the dairy in Nora. Its proximity to the Apple River watershed poses a grave threat to the “really prime smallmouth habitat up there.”

Mike works in construction and identifies himself as politically conservative; not what you might expect from an environmentalist. Mike also considers himself a pragmatist. “You can only go after people so much on the environmental aspect. They’re numb to that; they hear this all the time. So, I looked for a way to explain it to people a different way.” The answer he came up with was “money.”

Mike notes that the Illinois Department of Resources and comparable agencies are perpetually and woefully underfunded, and ISA contributes a significant amount of financial support and volunteer manpower to agency initiatives around the state. “You

¹⁶ The smallmouth bass (*Micropterus dolomieu*) is a species of freshwater fish in the sunfish family. One of the black basses, it is sought-after as a gamefish by anglers all over the temperate zones of North America. The smallmouth bass is native to the upper and middle Mississippi River basin, the Saint Lawrence River–Great Lakes system, and up into the Hudson Bay basin. This species is fairly intolerant of pollution, and as such is a good natural indicator of a healthy habitat.

have all these organizations like ours who spend millions and millions of dollars on watersheds right there in the footprint of this proposed dairy. All that money could potentially go right down the drain if something was to happen with the dairy. And, inevitably, something will happen because that's the track record of CAFOs, in general. There is no reason to have wishful thinking that they're going to be good neighbors," says Mike. "It just doesn't pan out."

Mike makes the trip to fish in Jo Daviess County on a regular basis. Unlike Kathy, Mike's concern about the dairy can't be attributed to the NIMBY syndrome. Mike lives in Bradley, Illinois: 187 miles south of Nora.

Ed

Ed is one of the area transplants. He retired to Warren 9 years ago with his wife, Linda. A lifelong resident of the Chicago area, Ed has been coming to Warren since 1964. His former wife had deep ties to the area. "Her family is here, going back for generations. They were here before the turn of the century." Ed has spent decades in Warren with his family, and spent time fishing and hunting in the area. Ed's children are now 41, 39, 37, and 35; they grew up fishing out in Warren with their father. His grandchildren now come to visit him in Warren. "They like to go fishing with grandpa," Ed says, trying to downplay his pride. He laughs when he admits he's "looking forward to not having to bait their hooks anymore."

"The grandkids love coming out here. I own a couple hundred acres." As the crow flies, Ed's house is about 4 miles from the proposed site.

Ed loves living in Jo Daviess. “Warren is our hometown. That’s where we go to have our breakfast, that where we go to socialize, and our friends have businesses there.” He is also quite blunt about his concerns for his neighbors if the dairy is built. “What people fail to realize is that most of the residents in and around this area have been born bred and raised out here; this is their whole life. Most of these people have no place to go. This is where they chose to live; this is where they *want* to live. Linda and me, on the other hand, we implanted ourselves here when we retired. We have no problem packing up and moving onto the next adventure.” Ed is the first to point out that this is not the case for a number of his neighbors. “The locals, they don’t have that flexibility and they don’t have that capability. They’re not retired. They’re not as mobile and Linda and I are. *This* is where they have chosen to live out their life. *This* is where their jobs are. They bought their homes. They’re in the process of fixing them all up, remodeling them, making them their homestead because they’re younger couples. So, they have their whole future sunk in their home. Linda and I do not.” Ed takes a long breath and finally says, “It’s beautiful out here. Why would they want to leave?”

Matt

Matt is a younger variation on Ed’s general theme. The son of an architect, Matt grew up on the north side of Chicago, graduated from the Chicago Public Schools, and went on to be student at both MIT and the University of Chicago. “Did you think that when you emailed a small town in Northwest Illinois you'd reach someone who actually knew about a Smoot or a Brass Rat?” he jokes.

Matt has owned a farmhouse in Warren for over 18 years. “We’re not really sure how old the house is. It’s at least 100 years old, but we’re not exactly sure.” After many weekends back and forth between Chicago and Warren, Matt and his wife began thinking that they had the order of travel in reverse. “We realized that what we really wanted was to live in Warren, and go into the city every so often instead of the other way around. We’re tired of it in the city. We’re tired of the noise, were tired of the traffic. We’re just tired of it all the way around.” The relocation to Warren included some changes to the farmhouse, including the installation of the first central heating system the house has ever had and windows that didn’t allow sub-zero gusts of wind to leak into the house all winter. Matt jokingly explains, “My wife insisted on all these luxuries if we were going to live in the house year-round, like a heating system and new windows. Can you imagine?”

Matt’s wife is employed as a writer, and has the flexibility to work virtually anywhere. Matt, on the other hand, has owned a t-shirt manufacturing business since 1981. “They’re shirts with humor about science, animals, aviation...all sorts of things.” Their client list includes an enviable roster of museums, institutions, and retail outlets. A key concern for Matt was relocating his business to Warren. After looking for suitable space in the area, he purchased a former Honeywell plant, which was being closed and relocated his facility to Warren. He currently employs 5 people. “The building was in good shape, and had been pretty well taken care of. I was lucky to find it; the timing was just really good. I’d looked at a couple of other properties out here as well. Those buildings had been vacant much longer, and weren’t in as good a condition as the one I

bought.” Matt explains, “The other properties had been vacant for years before I started looking for space.” And after a pause he tells me, “They’re still vacant.”

Ken and Susan

Ken and his wife, Susan, have lived in Warren for 12 years. They have four children, ages 8 through 19, whom Susan has home-schooled. Transplants from Chicago, they have lived in two historic homes in Warren each of which they have painstakingly restored. Susan Turner also “adopted” a building in downtown Warren. “Our downtown had all these buildings that were just empty and boarded up. I adopted one of them, worked to repair it, and started a shop.” Susan comments that she thinks it “made a real difference to our neighbors to see us do these things. It was important to me, though, that they see us as being invested in the community. Most of the time, when people move out here from the city, they don’t stay very long. Usually it’s about 4 years.”

Susan’s husband, Ken, is a teacher at Schaumburg High School. His commute is 113 miles, each way. In this area of Illinois, it is not uncommon for people to commute to Chicago for work, and stay in the city during the week. Not so for Ken Turner. “He makes the drive every day, and comes home every day. He doesn’t stay in the city like some other people do,” Susan says. It’s a difficult commute, nevertheless “he’s done this for years, and he does it for our family, so that we can stay in Warren. This is where we live, where we’ve chosen to make our home. This is our community.”

Ken has been teaching over 20 years, and throughout his career has earned many professional awards and has been published many times. He agrees with Susan: “It’s true; my house is much closer to Dubuque than to Schaumburg. It is too bad my dream house

and my dream job are so far away from each other, but there is really nothing impossible about the commute. I consider myself blessed indeed to have found the job and home that I love.”

Ken and Susan own about ten acres in Warren. The window of their kitchen looks out on hundreds of acres of their neighbor’s farm. The view from the kitchen window “is right where the sunsets are,” Ken tells me. “As a teacher, this is more than I’d ever expected to have. We have beautiful views and huge trees on our property. I’d hoped to live here at least until I retired.” With a great deal of sadness he tells me, “I wanted to leave this property to my children.”

So this guy walks into a bar...

Rumors and whispers had been going through Nora and nearby Warren, IL¹⁷ ever since the Williams farm had been sold. On a Friday afternoon in November 2007, Kathy and Todd along with a number of their neighbors were informed via certified mail that a “Notice of Intent to Construct” had been filed with the Illinois Department of Agriculture by A.J. Bos.¹⁸ The application called for the construction of a dairy farm on two sites in Nora, each facility with capacity for an initial stock of 6,850 animal units. The speculation was true: A.J. Bos is planning to build what has come to be known as the ‘mega-dairy’ in Nora: a CAFO.

Meet A.J. Bos

A.J. Bos knows about big dairy.

About five years prior to his purchase of the acreage in Nora, A.J. bought 50% of Threemile Canyon Farms in Morrow County, Oregon.¹⁹ Located on 93,000 acres a few miles away from the Columbia River, the operation at Threemile Canyon Farms is reported to be possibly the largest dairy in the world. When the farm was originally

¹⁷ Warren and Nora are approximately 4 miles apart. The 2000 US Census lists Warren as having a population of 1496 people.

¹⁸ In Illinois, when an application of this nature is submitted for consideration, the law requires that neighbors within a certain distance of the property receive appropriate notice within a specified period of time.

¹⁹ Although the extended Bos family still owns 50% of Threemile Canyon Farms, subsequent to the time of filing his application for the Tradition Dairy Farm in Illinois, A.J. Bos was no longer listed as an owner of the facility.

issued a permit by the State of Oregon it initially allowed for 5,000-10,000 cows, with additional capacity to expand to 20,000 cows. As of 2005 the dairy housed nearly 53,000 cows, and it now has a permit to expand to 90,000-plus cows.

In 2007, Threemile Canyon Farms in Boardman, Oregon, reported that its 52,300-dairy-cow operation emits 15,500 pounds of ammonia per day, totaling more than 5,675,000 pounds per year. In testimony before the United States Senate in 2007, The National Association of Clean Air Agencies (NACAA) put a fine point on these numbers, noting that “(t)his is 75,000 pounds *more* than the nation’s number one manufacturing source of ammonia air pollution (CF Industries of Donaldson, Louisiana).²⁰ The Threemile Canyon Farm has also been plagued with two lawsuits alleging sexual discrimination,²¹ OSHA violations, illegal payroll deductions, failure to pay minimum wage, and retaliation for participation in union organizing efforts.²²

After a 2004 winter deposition study, U.S. Forest Service researchers reported that contamination from the eastern side of Oregon has infiltrated the Columbia Gorge, with acid fog and rain, which has detrimental effects on plants and rock surfaces.²³ With its 55,000 cows producing a ton of manure a minute — essentially a nonstop ammonia emission — the Forest Service wrote that this supports “the conclusion that a significant

²⁰ NACAA comment on the proposed CERCLA/EPCRA Administrative Reporting Exemption for Air Releases of Hazardous Substances from Animal Waste, published in the *Federal Register* on December 28, 2007 (72 *Federal Register* 73700); Superfund Docket Docket ID No. EPA-HQ-SFUND-2007-0469, U.S. Environmental Protection Agency, citing reporting from the U.S. EPA, Toxics Release Inventory, 2003, <http://www.epa.gov/triexplorer/>.

²¹ Three women filed a second lawsuit in November 2005, over sexual discrimination at the dairy. According to sworn affidavits from 12 Threemile Canyon Farms employees, dairy co-owner A.J. Bos said, “I don’t want women at the farm—they are only good for the bed.” A spokesman for the dairy was quoted in the *Seattle Times* calling the allegation “an outright lie.” Said spokesman Len Bergstein, “This is a labor-organizing campaign disguised as a lawsuit,”

²² These suits were settled out of court for amounts ranging from \$70,000 to \$200,000.

²³ They are also investigating ammonia concentrations found in the Hell’s Canyon area where ancient Indian rock art and sensitive lichens are being affected.

contribution to the increase in nitrogen is from ammonia and is from sources in the Columbia Basin”²⁴ and that the Three Mile Canyon Farm near the Boardman Power Plant “stands out as a new and extremely large ammonia source.”²⁵

Although A.J.’s business is based in Bakersfield, CA, the Bos family has dairy CAFOs in multiple states. A.J. currently has about 10,000 cows on a farm near Bakersfield, and keeps them on land he rents from his father. The extended Bos family has dairy cows in multiple states all over the country, including right next door to Illinois in Indiana.

The tightly-knit Bos family is known as one of the nation’s most powerful dairy farming families. Even so, the 40-year-old Bos, a third generation dairy man, portrays himself as a family farmer, rather than the stereotypical “mega-farmer” usually associated with industrialized agriculture. He sees the family business as being in keeping with the American institution of family farms. He’ll be the first to point out that he doesn’t have investors. “It’s just me, my wife, and my kids,” comments the father of four. “We grew up on dairies. We are family farms. We’re just bigger than what other people out there are used to.” In an area like Nora, where the next-largest non-CAFO herd of cattle consists of 800 cows, and the largest CAFO holds 3,900 cows, the leap to almost 7,000 cows brings a whole new meaning to ‘bigger.’ “The small guys are getting bigger,” Bos

²⁴ Including Portland General Electric’s antiquated coal-burning power plant that operates according to outdated 30-year-old specifications.

²⁵ Nitrogen increases in the Eastern portion of the Columbia River Gorge National Scenic Area. Bob Bachman. USDA Forest Service. www.wilderness.net/toolboxes/documents/air/Columbia%20River%20Gorge%20NSA.doc

explains. “It’s just like what’s going on in the rest of the United States. Businesses keep building.”

Taking umbrage at A.J. Bos’ self-characterization as a ‘family farmer,” one Warren resident tells me: “Out here, that’s *not* our idea of a ‘family farmer.’ Out here ‘family farmers’ are part of the community. They work their land themselves; they might hire help, but they’re still out there, on their land. They *live* on the land that they work. They live here *with their families*. Out here, family farmers know their neighbors. They know their *animals*, for goodness sake.” Noting that his family keeps cattle as part of their business enterprise, the resident tells me, “We keep cows, raise them for beef, but we *do not* treat our animals like that.”

Another resident tells me “I went to these meetings with Bos, and he’s trying to paint this picture for everyone that he’s a dairy farmer, *just like them*, and how this is a *family* business. It’s a *family* farm. He’s telling us all how he has children that he wants to pass on this land to, and these people are so naive that they’re buying it. They’re asking him when he’s going to move out here with his family to live on the farm, and they were *serious!* So he’s telling them ‘oh we can’t, because it would be so hard on the children to pull them away from their friends and school.’ It just made me sick, how they believed him. Be honest; if you were living in a multimillion-dollar house with a swimming pool on a golf course in California would *you* move out here to the middle of nowhere?”

Enclosed with the package of documents in the certified envelope was a letter inviting everyone who had received notice to an informal gathering at the Nora Bar in

order to meet A.J. personally, have refreshments, and learn more about his plans for the nearly 1500 acres he'd acquired at a cost of approximately \$9.1 million. The certified letters arrived in Friday's mail; the information session at the bar was scheduled for the following Monday.

Kathy recalls that she had questions from her neighbors about the application for the dairy and the meeting at the Nora Bar. "My nearest neighbors called us and asked if we were going, what it was about, what it was that they got in the mail."

For the residents of Nora and Warren who are opposing this dairy, the November meeting at the Nora Bar is now infamous.

In November 2007, sporting cowboy boots and a sweatshirt, A.J. Bos walked into the Nora Bar to introduce himself to his new neighbors.

Kathy and Todd were joined for the meeting at the Nora Bar by approximately 80 local residents, all of whom lived or operated businesses close enough to the proposed site that they were required by law to be notified about the application by the state. Mr. Bos was joined at the meeting by Terry Feldmann, who has been retained by Mr. Bos as an engineer for the project; Nic Anderson who is the Business Developer for the Illinois Livestock Development Group, a coalition of Illinois farm, grain, and livestock producer groups; and Larry Lyons, owner of Lyons Well Drilling, located in Stockton, Illinois.

Attendees at the meeting asked a number of questions about the project. One person who was there recalls a question "asked by a gentleman who had wondered who was going to be doing the work as far as the building of these facilities. Would you be

employing local help? Would it be union work? What they were going to be doing as far as the building process of this. Economic-wise, if it was going to be local.” The observer continued, “It was answered kind of rudely. He (A.J. Bos) said to him ‘Would *you?*’ meaning, you’re going to go for the best bid. That he’d be taking the work that would give the best price.”

Another question was asked about wells. Mr. Lyons “assured us that there would be plenty of water. He didn’t say that it would be *good* water; just that it would be plenty of water. He said that the dairy would be using a large amount of water a day.” Residents voiced other concerns about wells. In the past, there have been difficulties for residents with wells drying up. Furthermore, in the town of Nora, everyone is totally reliant on their well; there is no municipal water supply. And, as one person at the meeting pointed out, “some of the wells in Nora aren't that deep.”

An interviewee who attended the meeting at the bar says that they were concerned about the “shortness” of the answers the community received. “You know...just short answers. I just would’ve thought, with coming into a community, and in a room of 80 people, proposing a project like this, that there maybe would've been...I just felt a little bit...well, they opened it up for questions, and then if you *did* ask, it was just short, curt answers.”

Another Warren resident doesn’t mince words. “They had their meeting at the Nora Bar. Have you ever been to the Nora Bar?” he asks me. I explain that I have not. He asks where I live, and I explain that I live near Chicago, in Wilmette. He replies, “Okay,

let me tell you, this is not some posh bar like where you come from. The Nora Bar is nothing but a watering hole for late-night drinking.”

Some local residents see choice of the Nora Bar for the original meeting as more than a coincidence. “What had been transpiring since last summer (2007) is that A.J. Bos and Nic Anderson, his hired lobbyist, have been coming into the area quietly, flying under the radar and trying to gobble up people into believing what they’re doing is good for the community.” The interviewee continued, “That’s what they historically do; come into depressed areas, areas where they can go into and they can say ‘We’re gonna save you people. It’s going to cost you a little bit, but we’re gonna save you.’ Nic Anderson spent *many* weekends in the Nora Bar passing out free beer to the locals, convincing them it would be good to let this CAFO come in. That’s how these things begin. You look anywhere you go, they come into depressed areas where the land is cheap and the water is plentiful and the people are basically bumpkins. It got started in the Nora Bar where they convinced them it would be good. They were so far under the radar that the people in Warren didn’t know that this was going on in Nora, three miles away.”

So, A.J. Bos walks into the bar, but he is no ordinary neighbor.

Several of Kathy’s neighbors called her after the November meeting with concerns about the dairy coming into their community. “We got together with some neighbors and discussed it together personally instead of on the phone. We talked about what to do.” The initial gathering took place in December 2007, in a neighbor’s garage and included approximately 25 people, including a few that live in a nearby county. “We

took some notes. We had some ideas on what to do, what we could try to do, says Kathy.

“I didn’t even know what a CAFO was when this came about.”

ORGANIZING AGAINST THE CAFO:

People outside the community who are familiar with the battles over CAFO siting have been following the proceedings in Nora with interest. In general, they have praise for the efforts being made by the neighbors. “They seem to be active, there seem to be, you know, several different organizational structures in play -- the extent to which they collaborate, I don’t know. But I think the mere fact that you have a number of people leading the organizing effort, and speaking out, is a reflection of how concerned they are. It seems to me they’re doing a reasonably good job,” is an observation offered by one outside observer. In my own discussions with the members of HOMES, it they describe natural discussions about what the appropriate tactics are, whether it should be legal, whether it should be regulatory, or whether it should be getting members of Congress and their local legislators involved.

One of the things that stand out in talking to people within the community about their efforts to organize around this dairy is that a large number of the people, who seem to be leading the charge as it were, are all “transplants” to the area²⁶. That is, they have relocated to Jo Daviess County at some relatively recent point in time. Others in the group have lived in the immediate area for their entire lives. Often, the people I interviewed came from families who had been in this area of the county for multiple generations, the majority having settled there before the turn of the last century.

²⁶ In this particular case, the overwhelming number of transplants in Nora and Warren relocated from Chicago or the immediate inner-suburbs of the Chicago-metro area.

To see transplants step to the fore lead the organizing effort is not an uncommon phenomena in communities that organize themselves to fight CAFOs.²⁷ One of the explanations offered for this is that transplants are not necessarily as clearly integrated into the existing social network, or the existing social fabric. As such, they're not necessarily party to the kinds of social sanctions that others will feel by coming out and opposing the facility. Transplants also tend have more experience in political organizing.

In what Ed refers to as his "previous life," he spent nearly 38 years at one of the nation's largest pharmaceutical companies, and was in charge of animal health and services for the company. "Every technician for every animal at Abbott Laboratories reported to me. That's thousands of animals. I am fully aware of what animal life is all about, what animals in cages is all about. In my former responsibility I had to report to the USDA, the FDA, the EPA, you name it. It's very highly regulated."

After his retirement, Ed and Linda opened an antique store. "One of the ladies in town owned a craft and antique shop. My wife and I stopped in there one day, this was last year, last October or November, somewhere around there, because we own an antique shop and we were in her place looking at antiques to buy. She's the one that first told Linda and I that she's going to be selling her farm to this guy from California bringing in a big dairy and Linda and I both said, 'We haven't heard anything about this.' This was before the media, before anybody moved about it. And then the wife and her started talking and we start getting concerned when we start hearing the numbers that he

²⁷ In communities where so-called transplants are not leading the charge, oftentimes and for a variety of reasons, women are the leaders in local community resistance. (Johnson, Carolyn: Raising a Stink: The Struggle over Factory Hog Farms in Nebraska; Bison Books, 2003.)

wants to bring into a concentration-type situation So she told us all about that and Linda said, ‘Oh my God, does this town know what’s coming?’ And they didn’t.”

The woman in the shop owned the lynchpin property that allowed Mr. Bos to consolidate the parcels he needed to build the dairy.²⁸ Without this particular piece of land, Mr. Bos’ plans would have been by and large derailed. The understanding around town is that she has in fact sold her property to A.J. Bos, or he’s tied her up in a contractual “intent to buy”. Either way, the parcel is for all intents and purposes part of the Bos holdings. The woman who sold the critical parcel to A.J. Bos is Janet, Kathy’s mother in law.

After Ed and Linda spoke to Janet in her shop, they “started talking early on to people in Warren to see what they know about it, and bottom line was not very many people knew very much about it. One thing led to another and before you knew it we started spreading the word around town that this is coming in and you people better open up your eyes because this is not going be good.”

Susan admits being “utterly clueless” about the proposal for the Bos dairy until January of 2008. “A handful of people knew what was going on by the end of November, but only the adjacent properties were required to be notified about setbacks and those sorts of things. We just didn’t know. After A.J. Bos’ public meeting at the Nora Bar in November, people started to write letters to the editor of the local paper, but I didn’t pay much attention, because it didn’t seem like it would affect us.” A conversation with Ed

²⁸ It was explained to me that the woman “owns a little 5-acre or 7-acre parcel right on the creek, right by the bridge that the creek goes right through the Bos property. Now it goes through her property and then into his property. She lives right there. Had she told him the same thing that Kathy told A.J., ‘Get off my property and don’t ever come back,’ if she had she said that, we wouldn’t be talking dear.”

Johnson in early January was Susan's wake up call. "I realized that the people who were organizing in the community to fight this were really sending out a serious cry for help. I am part of this community, so I responded."

The communities in which CAFOs are built share certain characteristics. CAFOs are always built in rural areas, located disproportionately in communities with a high incidence of poverty. Land in these areas is inexpensive. Population density tends to be quite low, which is advantageous to builders who are required by law to comply with setback limitations which accommodate existing homes and businesses. Like any other polluting or otherwise "undesirable" industry, where these facilities wind up being built is a sign of the strength - or weakness - of a local population's political and economic power. Illustrating this point is a comment made by one interviewee who observed that "You don't see Bos or any of them trying to build this in Kenilworth²⁹, now do you? What do think would happen if they tried this up there?"

As the community began to organize itself around fighting the dairy, they learned that the siting of CAFOs follows a general pattern. "It's almost like it's orchestrated," says one resident. "They do the *same thing*. I'm sure you see the pattern; they follow a pattern. " Another explains how she's seen the process unfold, "It's been brought in under the wire and set up to get through our weak Illinois rules and regulations for these CAFOs. It's too much, too fast. When this first started, everything was happening so fast,

²⁹ Kenilworth, IL is smaller than Warren, IL, but is also one of the wealthiest communities in the Chicago-metro region. It has a population of approximately 1,200 people, an average household income of over \$200,000 and a median home price of \$977,000, according to the 2000 U.S. Census. The community is noted also for its extremely conservative politics, and in September 2007 Forbes magazine ranked Kenilworth in a three-way tie, the richest zip code in America.

everything just too rushed to get this in. It just was crammed down our throats.” She compares it to “a bad outline to a book. They start out first with the notice of intent to construct. They portray it that it's this informational meeting to get the people supposedly informed of this. Then they go on with their how they're going to do their permits, and about how it's going to be good for the local economy. That it's going to be good for the school system.”

I asked the residents why they thought Nora was an appealing site for Mr. Bos. “My first thought was, even though for us that amount of money per acre seemed to be expensive for us that live here, but when you hear that they pay for in other areas, this was cheap. It was cheap and easy for what they pay. He will have to have monitoring wells. The water won't be free. When you have a well, it's not free, with the upkeep and everything. But if they're paying for such ridiculous amounts of water elsewhere, and here you've got monitoring wells plus a large supply of water that we do have here, it was probably perfect for him.” Others echo these sentiments, adding that the lack of population density in Nora made accommodation of the legal setbacks far less challenging than they would have been in a more densely-populated area.

Whatever the reason or the appeal of Nora might be to Mr. Bos, Nora is an “Everytown” in this context. Poor, rural, and sparsely populated this small town could be anywhere. Still, the residents of Nora don't see themselves alone as a community in their fight against the dairy. Beverly tells me, “When Kathy and the initial group started, they were given some really wonderful names.³⁰ I always tell her the good Lord looks after her, because the names that were given to them, gave them really good advice.”

³⁰ Specifically, in working to fight the installation of this dairy, residents reached out to other communities who had mobilized to oppose CAFOs in their areas.

I asked another resident if they felt their opposition had been surprising to Mr. Bos. “I’m sure is not their first time they’ve ran up against people who are against these.”

The opposition to the dairy might not have startled Mr. Bos, but it certainly shocked a number of residents in Jo Daviess County. That initial December meeting in the garage of 25 worried neighbors and residents of Jo Daviess County led to the formation of a community-based group, Helping Others Maintain Environmental Standards, or HOMES, who have come together across a broad socioeconomic spectrum, to oppose this dairy.

By January, HOMES had chartered a not-for-profit group to combat the dairy. They have regular meetings, every Tuesday night. Attendance at the meetings ranges between 50 to 60 local residents, as well as others who come from outside the immediate area to learn more about the project. In addition, the members of HOMES have been in contact with environmental organizations that have battled CAFOs previously. HOMES have hosted a series of free, open-forum educational presentations from the community, and have brought in a variety of speakers on the subject of CAFOs. They have also secured an attorney to represent the community. HOMES has manufactured and distributed lawn signs opposing the dairy, informational flyers, leaflets, and petitions. They’ve built a comprehensive website for their organization, and have circulated petitions throughout the community, urging neighbors and visitors to the area to oppose this installation. They launched a phone-calling and letter-writing campaign to various political officials, and their press releases have been picked up in a myriad of

publications throughout Illinois, and into the surrounding states. It took the members of HOMES less than eight weeks to complete these tasks.

Ken draws comfort from working with the rest of the people in HOMES. “The people fighting in HOMES,” he says, “these are good people that God has drawn together.”

These facilities create extreme divisiveness in rural communities and turn people against each other in ways that they have never before encountered in their communities. Although the rural Midwest is certainly not any kind of bucolic living, there is a nonetheless a certain social contract that tends to prevail in these areas, and in this type of situation, that contract becomes violated. Residents get pitted against each other, and the polarization affects virtually every corner of the community. And it permeates into the school system, into the churches, into the bars, into cafes. Commonly, because there is no framework for addressing these issues on a local basis there are also no mechanisms for solving these problems because they have never arisen. The recurrent pattern is for residents will turn to what can be viewed as extra-local mechanisms: the courtroom, the legal system, and the state regulatory structure, in whatever shape it exists. Suddenly, whatever “social contract” used to be a local means of dealing with problems is removed, and so the divisiveness that people feel in these communities then gets absorbed into these supra-local challenges.

In fact, one has to wonder, how this dairy has become so divisive when there are only a limited number of people who stand to benefit. Well, because, that’s exactly the point, according to Dr. Thu. “You have a limited number of people who stand to benefit -

- I suspect, although I have not done the polling, that despite that, despite the fact that likely most people are against it, that the political structure, the regulatory structure is in place on the side of the constructors, the builders of the facility. So they are armed, basically, with the rulebook that allows them to do it in the face of all of this opposition. And that's the rub." Dr. Thu's comments are echoed throughout my conversations with local residents. The "stacking of the deck" in an already dire situation creates so much added animosity and acrimony because the vast majority of people in the local community are cut out of the process altogether.³¹

A number of people with whom I spoke are vehemently opposed to the siting of this dairy in Nora. One question they wrestle with is why a number of their fellow residents haven't joined the fight and "gotten on board" with resisting the dairy. They are dismayed by other residents remaining neutral or supporting the facility. I heard many times and many variations of: "They don't understand." "Why don't they understand?" "Why don't they understand that this is such a bad idea?"

An often-repeated answer is that, quite frankly, people in rural areas are just not used to confrontation. "That's part of the reason that you see a lot of people not diving in to oppose it," says an interviewee. "They will oppose things, sort of in voice, in the hallway, but they won't come out publicly, because they don't want to create a ruckus, or they're not use to confrontation. Dr. Kendall Thu, who is renowned for his research on

³¹ A good contrast to this might be the example of local schools in Illinois. If a school official or district superintendent is not doing their job, local community members are able to do something about it. They have the legal authority, essentially, to address their school board and voice their lack of support. The local school board will respond in their official capacity, and the problem will be resolved one way or another. The laws of the State of Illinois afford communities that empowerment. In the case of CAFOs, the entire decision-making purview is within the Illinois Department of Agriculture, depriving communities of any local control or "home rule."

CAFOs³² concurs: “Quite frequently, these people are members of social networks, in which those who are in favor of the facility are a part, and so they don’t want to create undue social divisions for themselves. Culturally, that’s not what they’re used to in a rural area.”

According to an interviewee, “That’s what people don’t understand, is that when you get to know these folks in rural areas -- in any area, for that matter -- your life is oriented around your home, that’s where your family is, that’s where your friends come to socialize -- that’s the centerpiece of your entire life. And when you feel as though your home is potentially or actually violated, then you’re going to strike back, and that’s what’s happening here.”

Efforts undertaken by HOMES have been credited with leading to unprecedented turnout at the public meetings which followed. In keeping with Illinois law, the Illinois Department of Agriculture (IDOA) is required to hold informational meetings. On the night of January 10, 2008 Susan and Ken – along with nearly 600 other members of the public – attended a meeting in the gymnasium at Warren High School. Despite the bitter cold outside, it was a standing-room-only event. Astounded by the turnout for the meeting, the school principal noted to a local newspaper that she’d never seen so many people attend a non-sporting event at the school. Area residents took the opportunity to ask further questions of A.J. Bos, as well as the representatives from the Illinois Department of Agriculture, and Mr. Bos’ engineering team.

³² In particular, the relationships between industrialized food systems, the environment, public health, rural social dynamics, and state power and policy.

“All of a sudden there’s this big meeting at the Warren High School where the Illinois Department of Ag held an open-forum meeting where A.J. Bos, and his attorney, and Nic Anderson, try and convince the residents of Warren that pollution was good for them. The whole thing is on tape, sworn testimony,” says one resident. “Where they *weren’t* expecting problems was from the people of Warren – and namely there are about a dozen of them – and I would not consider them your ‘locals.’ One teaches chemistry at Schaumburg High School, one teaches at Highland College; there were a lot of educated people that said ‘Hey, this is not good, people.’”

One issue that took residents by surprise was learning that the IDOA has no ability to deny Mr. Bos’ application for his facility. Enacted in 1996, the Illinois Livestock Management Facilities Act (ILMFA) conferred upon the IDOA the final authority to approve applications for facilities of this nature. The broad brush-strokes of the law are summed up this way: there are eight specific criteria that must be reviewed by the IDOA when considering an application for the construction of a CAFO. In the event that the minimum for all eight criteria are met, the IDOA is required by law to approve the application. They have no discretion to dent the permit. “This was the beginning,” Ken says. “This is when we realized that the deck was stacked against us.”

By the end of the meeting Susan was reeling from what she’d heard and what she’d learned. “It was horrible...I was terrified and had no idea what to do or what was going to happen.” In recounting this it sounds like she’s talking from the end of a long tunnel. “I felt totally helpless and started to wonder if we would have to sell our house...if we would have to leave our home. I wondered what I was going to tell our children.”

On January 31, 2008 the Development and Planning Committee of the Jo Davies County Board held a meeting to discuss the proposal for Tradition Dairy Farm. Once again, the meeting was jam-packed with residents; it lasted until almost midnight, nearly 6 hours. In the end, the committee voted 4-3 against granting a positive recommendation for the dairy proposal.³³ The committee's recommendation would then be forwarded to the full board who would vote on it less than a month later, at their February meeting.

Caught Between the Karst and a Hard Place

Pete Hardin is a journalist who has been following the proposal for the mega-dairy since the beginning. "Politics and emotion aside," he notes, "the bedrock geology underlying the proposed dairy site may be the ultimate deciding factor in whether the project lives or dies." Pete may well be right on the money.

As noted earlier, the ILMFA sets forth eight criteria which must be considered when an approval for the construction of a CAFO is granted. The fourth criterion is what the residents of Nora and Warren have come to regard as their life raft:

Whether the facility is located within a 100-year floodplain or an otherwise environmentally sensitive area (defined as an area of *karst area* or with aquifer material within 5 feet of the bottom of the livestock waste handling facility) and *whether construction standards set forth in the notice of intent to construct are consistent with the goal of protecting the safety of the area*; ILFMA Section 900.405 (h)(4) (emphasis added)

³³ One observer noted that A.J. Bos seemed "surprised and physically jolted" by the committee's disapproval of his project. The committee also failed to approve Mr. Bos' application to have the dairy included as part of the local TIF District and Enterprise Zone, which would have allowed him to avoid paying sales tax on a large number of his purchases.

A “karst area” is defined by the Livestock Management Facilities Act as “an area with land surface containing sinkholes, large spring, disrupted land drainage, and underground drainage systems associated with karstified carbonate bedrock and caves or a land surface without these features by containing a karstified carbonate bedrock unit generally overlain by less than 60 feet of unconsolidated materials.”³⁴

The term “karst” refers to a landscape that typically is pockmarked with sinkholes, may be underlain by caves, and has many large springs that discharge into stream valleys. Karst landscapes form when water from rain and snow melt seeps through a relatively thin soil cover and into fractured and soluble bedrock.³⁵ As water moves through the fractured rock, it slowly (over thousands of years) dissolves and enlarges pathways along the fractures and bedding planes of the rock. Once these underground drainage pathways have been established in the bedrock, surface-water drainage is diverted underground. As a result, karst areas generally lack the network of surface streams seen in most other areas. In karst areas, surface runoff drains into sinkholes and flows through water-enlarged conduits (“caves” if they are big enough for a person to crawl into) in the underlying rock until it is discharged through springs into surface streams at lower elevations.

Two conditions must be present for karst landscapes. First, soluble rocks must be found at or near the surface of the soil. Second, the loose earth which overlays the soluble bedrock must be thinner than approximately 50 feet. In the northernmost 1/3 of Illinois, including Jo Daviess County, the karst landforms are usually relatively small—sinkholes are generally round and measure a few tens of feet in diameter. Road cuts which are

³⁴ [510 ILCS 77/10.24] Caves, sinkholes and carbonate bedrock were mapped in the Jo Daviess County area as part of a preliminary estimate of the extent of karst terrain in the state of Illinois by Panno et al. (1997a) and as a map by Weibel and Panno (1997).

³⁵ limestone or dolostone

visible from highway construction show enlarged crevices in the rocks, many of which have been fully or partly filled with soil.³⁶

It is important to note that area *need not contain sinkholes* to be classified as karst. In fact, the term “karst” does not only refer to surface features such as sinkholes, cave openings, and large springs. Although these are typical surface indicators of karst areas, an area may be underlain by fractured bedrock that acts as a karst aquifer. When this occurs, the area is classified as karst even if no sinkholes are visible.

When discussing karst, it’s the *aquifer* that is critical, not the topography. Groundwater flowing through a karst aquifer can travel in *miles* per hour. In comparison, groundwater flowing through a sand and gravel aquifer may travel in speeds of *feet* per year. Because water moves so quickly through a karst aquifer, pollutants at or near the surface of the soil (e.g., a spill or seepage of animal waste) can easily contaminate wells many miles away from the spill site in a matter of hours.

Groundwater in karst landscapes is vulnerable to contamination because of two key features, namely the broken and “honeycombed” bedrock and the lack of a thick soil cover. Karst aquifers are well-known for their poor water quality, particularly the presence of microbial pathogens, chemical pollutants, and suspended sediment. Water flows in karst principally via conduits, permitting only little time or surface area for the removal of surface-derived contaminants.³⁷ In karst areas, recharge to the water table is rapid (often occurring within minutes or a few hours of a rainfall) and can carry with it contaminants from the surface that may include effluent from private septic systems, agricultural chemicals, animal and live stock wastes, motor oil, industrial waste, and

³⁷ Recharge to the groundwater does not benefit from the slow filtering that occurs when rain and snowmelt seep through thick sequences of clay-rich glacial till or low-permeability bedrock.

garbage³⁸. As a result, in karst regions the threat of groundwater pollution from industrial, agricultural, and residential development is elevated.

Because there aren't any "quick fixes" to protecting a contaminated or threatened aquifer, ground water protection plans for these types of areas need to be planned with the long-term in mind. Theoretically, good management practice in agricultural regions would lessen the amount of pollutants reaching a given aquifer. However, lack of economic incentives to keep the aquifer uncontaminated provides little hope for protection and rarely leads to land-use change which might benefit the aquifer.

Jo Daviess County lies within the Driftless Area of Northwestern Illinois. It gets this name from the lack of glacial drift overlying the bedrock in the area that is found throughout the surrounding Midwestern states. According to the State of Illinois Geological Survey, virtually all of Jo Daviess County sits on karst. Its carbonate bedrock represents a significant aquifer for municipal and private wells in the county.

Thanks to the ILFMA, questions have been raised as to the underlying geology of the proposed dairy facility. Specifically, is the land under the dairy actually karst and if so, will the provision in the act pertaining to karst protection be enough to derail Mr. Bos' application? Residents opposing the dairy are hoping that the karst which will not shield their water from contamination will, in fact, shield them from the CAFO.

The crux of the karst issue is this: even if the dairy will sit atop karst, the IDOA cannot refuse to approve Mr. Bos' application. What *will* happen, however, is that the construction plan will require specific amendments, and the "lagoons" which are currently slated to be lined with a dense clay material will instead have to be built from

³⁸ <http://www.isgs.uiuc.edu/maps-data-pub/publications/geobits/geobit7.shtml>

solid concrete. This would raise the cost of the construction of the dairy exponentially, perhaps enough to make it economically unfeasible for Mr. Bos to continue with his plans.

You say yes, I say no. You say stop and I say go, go, go...³⁹

Questions about the possibility of karst beneath the dairy site were raised early on by the community and other groups which are highly concerned about the watershed in the area. Unsurprisingly, opinions were – and remain - split. Mr. Bos’ engineers had taken several vertical core boring samples, and had made the determination that the site did not sit on top of karst. Community residents believed otherwise and opined that the property most certainly did sit on top of karst. “We kept telling him it was on top of karst,” says an interviewee, “and Bos’ engineers kept saying it wasn’t.”

A fair portion of the January 10 meeting had been spent with Mr. Bos’ engineer, Terry Feldmann, presenting the community with the results of the soil samples they had drilled. He also presented a highly-detailed map of the region’s karst areas. Although acknowledging that there is a great deal of karst in the county, Mr. Feldmann explained that their soil samples and extensive inspection of Mr. Bos’ property within Jo Daviess determined that the property was *not* situated on karst, and in fact was approximately 12 miles away from the nearest karst formation.

Despite Mr. Feldmann’s professional and academic credentials, the residents I spoke with were highly dubious about the validity of the research that Mr. Bos’ engineers

³⁹ Lennon and McCartney

had done. “Give me a break,” one of them told me. “What else are they going to say? Those engineers work for him, he pays them, and they’ll say anything he wants them to.”

The karst issue finally came to a head at the February 11, 2008 meeting of the Jo Daviess County Board. At a special meeting held by the board several hours prior to their regularly-scheduled meeting, three different scientists appeared in front of the board. One was Pius Weibel, an expert on karst and a geologist with the Illinois State Geological Survey. A soil expert also testified, as did a representative from the Army Corps of Engineers. Their opinions were unanimous: the proposed site for the dairy was, indeed, located on karst. The county board reconvened at 7:00 that evening for their regular meeting. In the end, the full board voted 11-5 against recommending Mr. Bos’ proposal, and officially reported their decision to the IDOA.

Thanks to the ILFMA, the vote of the county board is considered “non-binding” by the State of Illinois and the IDOA; it is advisory only. Provision for the non-binding vote is in place to allow the county board to send the application back to the IDOA for further clarification and to request that the IDOA take a closer look at the criteria which have not, in the board’s opinion, been met by the applicant. Essentially, the IDOA is asked to gather more information about certain things (here, answering whether or not the dairy is on karst) and report back to the county board. For all this, it will still be the IDOA who will have to give their final approval to the project.

Subsequent to the Jo Daviess County Board’s request for additional information, the IDOA requested that ISGS karst expert Sam Panno make the trip to Jo Daviess

County to resolve the karst question. Mr. Panno and his team conducted a visual inspection of Tradition Family Dairy from adjacent roadways, as they had not been allowed permission to enter Mr. Bos' property. Their trip also included an examination of bedrock exposures in area road cuts. They looked at outcrops and quarries, examined reported sinkholes, and inspected a large spring located within five miles of the proposed location for Tradition Family Dairy.

Mr. Panno's report stated that in general, most outcrops and quarries they observed "yielded a clear view of the Galena Group carbonate rock, and strongly suggested that karst features are ubiquitous in the carbonate rock throughout the area. These descriptions and photographs add additional evidence to our conclusion that the bedrock made up of Galena Group carbonate rock is replete with karst features in Jo Daviess County and that the Galena Group carbonate rock constitutes a karst aquifer."

Mr. Panno and the rest of his team also examined recent aerial photographs (2005) of the proposed site and vicinity as well as older (1947) aerial photographs. These older photos revealed an area slightly less than 0.5 square miles, located just south and southwest of the Tradition Dairy site that "appears to be a pasture containing circular to elliptical features with dark centers and dark rims, and similarly-shaped light colored features."⁴⁰

⁴⁰ These features are about 300 or so feet in diameter and appear to be cover-collapse sinkholes. Only a few of these features, characterized as sinkholes in Mr. Panno's report are still discernible in the 2005 photograph of the same area. Given the history of mining in Jo Daviess County, Mr. Panno and his team considered the possibility that these circular/elliptical features might be exploration pits or mine shafts. To answer this question the locations of the suspected sinkholes were compared to a map of the mined areas of Jo Daviess County. M, Panno found no record of any mining within a mile of the proposed site and the suspected sinkhole. They also looked at 1947 aerial photographs of the known mined areas in the vicinity of Nora and Warren to see if corresponding patterns were observed. He found that no such patterns were present in the mined areas.⁴⁰

Consequently Mr. Panno concluded that, in the absence of any evidence to the contrary, “it must be assumed that these are natural features and are probably sinkholes that have since been obscured by activities associated with row crop agriculture. A worst-case (and likely) scenario would be that the proposed sites and their surroundings contain similarly obscured sinkholes.”⁴¹

Mr. Panno’s report concluded unequivocally that “based on bedrock geology, the occurrence of caves in the area of the proposed dairy facility near Nora, IL, and the above discussion, the site overlies a karst aquifer. An examination of drill logs (obtained from the ISGS Records Library) from the area suggest that there is about 20 feet of soil and loess (wind-blown silt) overlying bedrock.”⁴²

Mr. Panno went on to inspect the groundwater quality of the karst aquifer underlying the proposed sites, and in the vicinity of the proposed site. He used this as an indicator of the susceptibility of the aquifer to surface-borne contaminants.⁴³ As a result of these water tests, Mr. Panno was able to detect the presence of nitrate and chloride, even at depths of hundreds of feet. They concluded that this indicated groundwater

⁴¹ Implications for the presence of obscured sinkholes on the proposed sites would then have to be considered under Section 13a-5 of the Livestock Management Facilities Act.

⁴² Some drill logs suggest that thin (5 feet or less) of Maquoketa shale may be present in the area with water levels ranging between 16 and 70 feet below the surface (based on water well records). These unconsolidated sediment data are supported by 30 soil borings of the sites drilled and logged by Terracon, an engineering firm hired by the developers, and a report on the soil boring information by Johnson (2008). Boring logs of the two proposed sites reveal relatively thin (from 5 to 20 feet thick) unconsolidated materials overlying weathered limestone bedrock. Because most borings did not extend more than a depth of 10 feet, the average thickness of the unconsolidated materials at the sites is unclear, but the thickest sediment is less than 20 feet with little or no shale protecting the underlying aquifer. This is considerably less than the 60 feet of unconsolidated material overlying karstified carbonate bedrock recommended in Section 10.24 of the Livestock Management Facilities Act. Further, the proposed site area is clearly within an environmentally sensitive area based on an aquifer sensitivity map prepared by McGarry and Riggs (2000).

⁴³ The Illinois State Water Survey maintains a database of water quality data for the state of Illinois which was accessed by Mr. Panno for his investigation. Because of the paucity of water quality records in the area, some of the wells are located just across the border to the east in adjacent Stephenson County, an area which has the same bedrock geology and aquifer, but a thicker sequence of unconsolidated materials.

contamination is occurring in the karst aquifer surrounding the proposed dairy sites. The water quality data, plus the thin cover of unconsolidated sediment, and the likelihood of sinkholes in the area, wrote Mr. Panno, “support the likelihood that groundwater in the karst aquifer underlying the proposed dairy sites could easily be contaminated by surface-borne pollutants.”

When questioned about the feasibility of trying to determine if a rock body contains karst features by relying solely on drilling, Mr. Panno stated that it was not surprising that “in an area where the carbonate rock having vertical or near vertical fractures or crevices (somewhere between an inch and six inches wide) every 10 to 40 or so feet, that vertical drill holes would miss these fractures with 3 inch diameter boreholes.” Mr. Panno went on to explain, “It is important to realize that it only takes one fracture or crevice to transport a contaminant into the underlying carbonate aquifer. Based on what is known of the area⁴⁴ and the limitations of drilling, it seems that one would want to err on the side of caution and assume the proposed sites are lying over karst features and invest in a (manure) containment system that would not be so easily compromised.”

To sum up, it is the professional opinion of the karst expert within the ISGS that most of Jo Davies County could be characterized as karst given the dominance of carbonate bedrock and the karst aquifer throughout the county. The proposed sites for the dairy facility appear to be underlain by a karst aquifer that, in turn, is overlain by typically less than 20 feet, and as little as 5 feet of unconsolidated materials. Aerial photographs of the sites taken in 1947 indicate that there are sinkholes immediately

⁴⁴ That is, it is difficult to find a road cut or quarry within the carbonate rock that does not have abundant karst features.

adjacent to the proposed sites, and possibly within the perimeters of the proposed sites. Further, contamination of the aquifer from road salt and nitrogen-fertilizers which were able to be measured at depths of hundreds of feet (based on available water quality data in the area of the proposed sites) suggest that the karst aquifer - as are all karst aquifers - is extremely vulnerable to surface-borne pollutants, includes a well-connected fracture system, and has rapid groundwater travel times. Given the thin nature of the overlying sediment and the likelihood of sinkholes on the sites, the karst aquifer underlying the proposed sites would be highly susceptible to groundwater contamination by spills/seeps of animal waste.

On the other side of the aisle is the professional opinion of Mr. Bos' engineers, who maintain that their multiple borings and visual inspection of the property show no signs of karst beneath the proposed dairy site.

The community held fast to the karst codicil. "We kept on pushing about the karst, and Goetsch⁴⁵ kept on telling us that we shouldn't be making up our minds until we heard from Sam Panno⁴⁶. He kept telling us that Sam Panno was the karst guy, 'Mr. Karst', and that we should all wait to hear what he had to say, that Panno would know for sure."

As noted above, Mr. Panno's conclusion agreed with the geologists already on record: "My conclusion is the same as before; that is, carbonate bedrock in the area contains abundant karst features that constitute a karst aquifer. The results of drilling

⁴⁵ Mr. Warren Goetsch is the Bureau Chief of Environmental Programs for the Illinois Department of Agriculture.

⁴⁶ Mr. Sam Panno is a Senior Geochemist in the Isotope Geochemistry Section of Geologic Mapping and Hydrogeology Center at the Illinois State Geological Survey, and is a noted expert in Karst geology and hydrogeology.

efforts in the area are not definitive, and obvious indicators of karst should not be ignored.”

One resident tells me, “Well, I guess that the Department of Ag and Goetsch didn’t like what they heard, because now they’re saying that they don’t have to listen to Panno’s opinion, either.” Mr. Panno concurs, noting in an e-mail that as IDOA works towards a formal resolution of the “karst terrain” issue in Mr. Bos’ application to construct his CAFO, he and his team are “being kept out of the loop at IDOA.” Writes Mr. Panno, “I’m not sure why.”

Exasperated by what he sees as flip-flopping by the IDOA on the karst issue, one resident contacted Dr. Malcom Field⁴⁷ at the US EPA and forwarded Dr. Field various materials pertaining to the research which had been done surrounding karst in the proposed dairy site. Noting that he had “absolutely no authority to force any particular actions,” Dr. Field responded in writing to the resident who contacted him.

“I briefly reviewed the other materials that you sent to me and my opinion remains the same as before if not reinforced. The site is definitely planned for a karstic terrane and it is extremely likely that your ground water will eventually be adversely impacted. The fact that the site investigators did not detect a sinkhole where they did their soil borings is irrelevant. Personally, I would consider the soil boring relatively worthless for the type of investigation needed anyway. Until one or more tracer test studies have been conducted to "prove" no connections from the site to drinking-water

⁴⁷ Dr. Field is a Senior Research Hydrogeologist with the Quantitative Risk Methods Group in EPA's National Center for Environmental Assessment. His specialties are solute-transport processes in karst aquifers and the development of risk assessments in karst terrenes using knowledge gained through comprehensive ground-water tracer tests. He is an expert in hydrologic tracer-test methodology and has developed the most comprehensive tracer-test design and analysis software available. As EPA's sole karst scientist and tracer hydrologist Dr. Field provides expert technical advice and support to EPA regional offices, states, and U.S. territories. He has published numerous journal articles, technical reports, and computer programs and was recently named Editor of the prestigious Journal of Cave and Karst Studies.

springs and wells, I would continue to assume that such connections do exist because that is the norm! Remember, if you have sinkhole anywhere in the area then you have one or more underground conduits and one or more connected springs down-gradient. Wells are less often connected because it is not common for wells to intersect solution conduits, which is another reason why I consider soil borings worthless.”

Although Dr. Field does not know Mr. Panno and has never worked with him, he is familiar with Mr. Panno’s articles. Dr. Field went on to write, “I cannot understand why Panno's reports – which are quite definitive - are being ignored. You definitely need to get someone out there to conduct tracer tests --- someone with professional experience conducting tracer tests in karstic terranes. There is no better method for evaluating solute transport processes in any terrane⁴⁸ than tracer tests.”⁴⁹

If the dairy is actually sited on karst, there is unquestionably an increased risk to the aquifer beneath it. But in the event of an unforeseen manure release from the dairy, what actually happens to the water in the aquifer if it becomes polluted? Likewise one may ask if appropriate Federal and State regulations pertaining to water contamination are in place to protect the water supply in Jo Daviess County.

⁴⁸ Note that terrane is the correct spelling. Terrain implies surficial features only while terrane implies both surface and subsurface features.

⁴⁹ Dr. Field’s reply also noted: “Your soil borings reports reminds me of a study done in Arkansas many years ago in which a landfill was proposed for the little town of Pindall (Arkansas). Dye tracing studies conducted jointly by Jim Quinlan and Tom Aley demonstrated radial flow and the potential for serious impacts on the water. The contractor engineer insisted that the "tight" clays indentified at the site from soil borings would require leachate to take 1500 years to reach the ground water. Quinlan and Aley were given permission to drill just one hole at the site which came up 30% chert nodules. In other words, leachate wouldn't take 1500 years to reach the ground water; rather it would take about 1500 minutes or about one day.”

The Nuts and Bolts of Water Pollution

FEDERAL:

Nationally, there are an estimated 1.3 million farms with livestock. Roughly, 238,000 of these farms are considered animal feeding operations (AFO), agricultural enterprises where animals are kept and raised in confinement. The U.S. Department of Agriculture estimates that facilities that confine livestock and poultry animals generate about 500 million tons of manure on a yearly basis, amounting to three times EPA's estimate of 150 million tons of human sanitary waste produced per annum⁵⁰. Frequently, many large operations do not have adequate cropland to effectively utilize the manure they generate as fertilizer. For these and other reasons, it is unsurprising that states have consistently identified agricultural sources - including CAFOs⁵¹ - as a leading contributor of water quality impairment in the surface waters which states self-assess in order to comply with the Federal CWA.

A brief history of the CWA:

In 1972, Congress passed far-reaching amendments to the Federal Water Pollution Control Act, and in doing so sent a strong sign that reductions in water pollution were to be a national priority. The fundamental goals of the CWA included (a) the restoration of "fishable, swimmable" quality of lakes, streams, and estuaries in the United States, and (b) making clear that from then on it would be the national policy that

⁵⁰ As defined in the U.S. under Section 305(b) of the CWA.

⁵¹ Rules affecting concentrated animal feeding operations have evolved from the 1972 Federal Clean Water Act (CWA)

“the discharge of toxic pollutants in toxic amounts be prohibited” [Section 101(a)(3)]. The CWA has had a deep and largely constructive effect on the nation’s waters. The enactment of the Clean Water Act has encouraged changes in production processes, the development of innovative pollution-control technologies, as well as changes in manufacturing and waste control practices. Since its passage, the “low hanging fruit” of early regulation efforts has been removed. Continued pollution control under the act has also been correspondingly sluggish because of the refusal of many industries to make additional changes to their processes or facilities. Despite the initial successes of regulation under the CWA, more than thirty years later, the discharge of pollutants - toxic and otherwise - into the waterways of the country remains part of doing “business as usual” particularly for agricultural operations.

The lack of a broader success in reducing water pollution can also be attributed to the structure of the Clean Water Act itself. For a host of practical and political reasons, Congress chose to draw important distinctions in the act between point sources⁵² of water pollution—“discrete conveyances” such as industrial and sewage treatment plant discharge pipes—and nonpoint sources—diffuse sources such as runoff of pesticides and fertilizers⁵³ from a farmer’s field. To date the bulk of the meaningful federal regulatory structure for addressing water pollution has been directed toward point sources. The result has been increasingly stringent regulation of industrial and other commercial

⁵² As set forth in Section 502, the act’s definitional section, “discharge of a pollutant” means “any addition of any pollutant to navigable waters from any point source” [33 U.S.C. §1362(12)]. Point source, in turn, means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. The term does not include agricultural stormwater discharges and return flows from irrigated agriculture. [Section 502(14); see also 40 C.F.R. §122]

⁵³ In this context “fertilizers” includes manure spread on the land.

enterprises, public sewage treatment plants, and federal and state government installations. Meaningful federal attention toward nonpoint sources, however, has been slow in coming. At present there is no comprehensive program of federal regulation of nonpoint sources, and these sources remain a significant cause of water pollution.⁵⁴

CAFOs have been regulated under the National Pollutant Discharge Elimination System (NPDES) program⁵⁵ since the mid-1970s. Section 502 of the CWA specifically defined “feedlots” as “point sources” along with dozens of other industries such as meat processing and fertilizer manufacturing. The Effluent Limitation Guidelines (ELG) and New Source Performance Standards (NSPS) established by the 1972 CWA required CAFOs to control manure-contaminated, process-generated wastewater by preventing its discharge into waters of the United States (or a state) except in the event of a 24-hour duration rainfall event that had an expected recurrence interval of 25 years. These so-called “no-discharge” requirements were adopted in 1974 and applied to any CAFO regardless of species, size, or configuration.⁵⁶ Despite these requirements, pollution from livestock operations has not been a focus of the EPA’s clean water efforts.

⁵⁴ However, by specifically limiting this prohibition to point source pollution, the act excludes from direct federal regulation the wide variety of diffuse sources of water pollution—such as uncollected runoff from farming and forestry operations—that currently account for an estimated 50% of all surface water pollution. This is compounded by the act’s specific exclusion of agricultural stormwater discharges and return flows from irrigated agriculture, even where they would otherwise come within the definition of point source. Ashford and Caldart, 2007

⁵⁵ The NPDES permit performs two important functions. First, it is the principal means by which EPA ensures that the various requirements of the Clean Water Act have been imposed on the individual discharger, and by which those requirements are applied to the particular circumstances of the individual discharger. Second, the NPDES permit is the principal means by which the individual discharger may ensure that it does not run afoul of the Section 301(a) prohibition against non-complying discharges. For, as specified in Section 402(k), which is commonly known as the act’s “permit shield” provision, adherence to the discharge limitations specified in its NPDES permit protects the discharger from liability under Section 301, unless the discharge limitations in the permit are inconsistent with a Section 307 standard “for a toxic pollutant injurious to human health” [33 U.S.C. §1342(k)].

⁵⁶ In 1976, EPA first defined exactly which livestock facilities constituted an AFO, and within this larger group, those operations that constituted a CAFO (point source) requiring NPDES permits in accordance with ELG/NSPS rules.

Many changes have occurred in the U.S. animal production industry since the development of the original CWA regulations. The continued trend toward fewer but larger operations, coupled with greater emphasis on more intensive production methods and specialization, is concentrating more manure nutrients and other animal waste constituents in some geographic areas. At the same time, inadequate manure management and the resulting risks, coupled with a pattern of noncompliance with the Clean Water Act by the livestock industry, has become the status quo. In order to catch up with industry changes, present technology, state regulatory requirements, and public expectations, it has become increasingly obvious that the intent of the EPA's 25-year-old CAFO rules need re-evaluation, clarification, and updating to provide environmental protection of the nation's waters.⁵⁷

Like many federal statutes, the 1972 amendments were an exercise in federalism. Although the program they created was undeniably a federal one, the new provisions also carved out an important role for the states. Congress clearly wanted to enlist the aid of the states in meeting the act's pollution reduction goals, and was careful not to extinguish all

⁵⁷ Continued inaction on the part of the EPA consequently led to litigation in an attempt to alleviate the situation. In 1989, the Natural Resources Defense Council sued EPA, alleging the agency had failed to comply with the CWA in regulating the livestock industry (Natural Resources Defense Council, Inc. v. Reilly, Civ. No. 89-2980 [RCL] 22 [D.D.C.], October 30, 1989). The case settled, subject to the agreement that EPA revise its CWA regulations for concentrated animal feeding operations (CAFOs). In February 2003, EPA promulgated new CAFO regulations to update the NPDES program and prevent environmental harm from these operations through better management of animal waste. The 2003 regulation required all CAFOs with a potential to discharge to be covered by NPDES permits. In 2005, the EPA CAFO Rule was challenged by the Waterkeeper Alliance and other environmental groups in the Second Circuit (Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486 [2d Cir. 2005]).⁵⁷ In the fall of 2006 the EPA issued a revised set of rules to comply with the *Waterkeeper* holding. As of today, the EPA is responding to public comments to the proposed revisions. Although no rule revisions have been issued to date, states were still required to have their revised permit programs in place as of July of 2005. Because every state has the authority to enact regulations more stringent than the federal requirements, the uncertainty of certain aspects of the EPA CAFO Rule has not posed substantial difficulties for states in enacting their revised permit programs. Many have enacted regulations more stringent than what was required by the rule before it was challenged in the *Waterkeeper Alliance* case.

state sovereignty over issues of water pollution control. Thus, the list of federal goals and policies in Section 101 is followed by a congressional recognition of “the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use . . . of land and water resources, and to consult with the Administrator [of EPA] in the exercise of his [or her] authority under this chapter” [33 U.S.C. §1251(b)]. Moreover, Congress provided significant opportunities for the states to implement and enforce the new federal water pollution program, subject to EPA’s right of oversight and ultimate control. As discussed, the states are given the first opportunity to set ambient water quality standards. Furthermore, any state may administer the NPDES program if it meets the criteria established by EPA, thus assuming primary responsibility for issuing and enforcing NPDES permits within its borders, and most states have chosen to do this.⁵⁸

Like other environmental statutes, the CWA places a strong emphasis on public participation. Congress not only made considerable information available to the public under the revised act, but it took pains to give the public meaningful opportunities to use that information. As revised in 1972, the Clean Water Act’s statement of purpose establishes citizen participation as one of the cornerstones on which the act’s

⁵⁸ While the states’ role is significant, however, there is no question that the 1972 amendments created a federal program designed to serve a set of clearly articulated federal interests, and that they gave EPA the authority, and the responsibility, to override state decisions that do not meet the federal criteria established under the act. Indeed, as noted by the Supreme Court in comparing the 1972 Federal Water Pollution Control Act Amendments with the 1970 Clean Air Act, “in comparison with the Clean Air Act, the Amendments give the EPA a more prominent role in relation to the States” [EPA v. State Water Resources Control Board, 426 U.S. 200, 214 (1976)]. As a practical matter, of course, EPA does not second-guess state implementation or enforcement of the act on a daily basis. Furthermore, respective federal administrations tend to vary in the degree of deference they choose to give to state decision making in these areas. Nonetheless, EPA retains broad authority to strengthen state water quality standards, to strengthen state-issued NPDES permits, and to take enforcement action against violators of such permits.

implementation and enforcement rest.⁵⁹ The legislative history of the 1972 amendments fully supports the strength and breadth of this language.⁶⁰ The act provides several specific opportunities for public participation, including the right to participate in the NPDES permitting process, and steps are taken as part of that process to facilitate such involvement. As noted in the House report on the 1972 amendments, this provision was designed “to restore the public’s confidence and to open wide the opportunities for the public to participate in a meaningful way in the decisions of government”⁶¹

STATE OF ILLINOIS

A Summary of Illinois’s NPDES Permit Program for CAFOs

As stated, the EPA has the authority and responsibility to delegate the CWA NPDES program and may authorize approved states to administer the program while still retaining oversight. EPA has ten regional offices which are responsible for the execution

⁵⁹ “Public participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the Administrator [of EPA] or any State under this [act] shall be provided for, encouraged, and assisted by the Administrator and the States. The Administrator, in cooperation with the States, shall develop and publish regulations specifying minimum guidelines for such programs. “[Section 101(e)]

⁶⁰ The Senate report stated that “[a] high degree of informed public participation in the control process is essential to the accomplishment of the goal we seek—a restored and protected natural environment” [S. Rep. No. 414, 92d Cong., 2d sess. (1971), reprinted in Senate Committee on Public Works, A Legislative History of the Federal Water Pollution Control Act Amendments of 1972, vol. 2 (1973) at 1430]. Indeed, as noted by Representative John Dingell of Michigan during the House debates on the conference bill, “the bill requires that its provisions be administered and enforced in a fishbowl-like atmosphere. This is excellent” [Statement of Rep. Dingell (Oct. 14, 1972), reprinted in Senate Committee on Public Works, A Legislative History of the Federal Water Pollution Control Act Amendments of 1972, vol. 1 (1973) at 249].

⁶¹ [H. Rep. No. 911, 92d Cong., 2d sess. 132, reprinted in A Legislative History of the Federal Water Pollution Control Act Amendments of 1972, vol. 1 (1973) at 819].

of EPA programs in their respective states and territories.⁶² The EPA Region 5 office is located in Chicago and oversees programs in Illinois, Indiana, Ohio, Michigan, Minnesota, and Wisconsin. The following is a brief review of Illinois's NPDES program for CAFOs in the state.

The governmental bodies involved in implementing and enforcing the requirements of the CAFO NPDES program for the State of Illinois include the IEPA Bureau of Water, the Illinois Pollution Control Board (IPCB), and the Illinois Attorney General. The IEPA is responsible for the administration, monitoring, and enforcement of the state's NPDES permit program for CAFOs and has the responsibility for issuing NPDES permits and monitoring permittees by conducting on-site inspections and reviewing discharge monitoring reports (ILL. ADMIN. CODE tit. 35, § 309.146 [2005]). The IPCB develops water quality standards (generally based on recommendations from the IEPA), hears CAFO permit appeals, and grants variances from NPDES permit requirements. The Attorney General prosecutes violations of the CWA (ILL. ADMIN. CODE tit. 35 § 501.101). Typically, the Attorney General waits for referrals from the IEPA before bringing a case. Citizens may also bring suits against CWA violators pursuant to both state and federal regulations (33 U.S.C. §1365[b]); 415 ILL. COMP. STAT. 5/31[d] [2005]).

It should be noted that the Illinois Department of Agriculture (IDOA) administers and enforces the Livestock Management Facilities Act (LMFA) (Illinois Livestock Management Facilities Act, 510 ILL. COMP. STAT. 77/1 to 77/999 [1996]). The LMFA establishes requirements for the design, construction, and operation of livestock

⁶² The administrator of each regional office reports directly to the administrator at EPA Headquarters in Washington, D.C.

management and livestock waste-handling facilities and sets forth the criteria for the training and certification of livestock facility operators. The LMFA also sets standards for the development and implementation of waste management plans (510 ILL. COMP. STAT. 77/10.40). Understandably, this has caused great confusion for many in terms of trying to determine what CAFO regulations preempt the others.⁶³

Illinois's NPDES regulations for CAFOs are modeled after federal CWA NPDES rules for CAFOs, dating back to 1978. Under the present scheme, Illinois requires NPDES permits for AFOs⁶⁴ it defines as "very large operators" or "large operators," as well as on a case-by-case basis.⁶⁵

Although Illinois's program is essentially in line with the rule, to date Illinois has failed to revise its permit program to comply with the EPA CAFO Rule. There are two glaring inconsistencies. First, Illinois's present permitting scheme violates the CWA's public participation requirements in that it shields nutrient management plans from public scrutiny and comment. The CWA definitively states that "[p]ublic participation in the

⁶³ Recently, the IEPA and IDOA initiated efforts to combine their regulatory programs by developing a workbook of forms and instructions intended to assist livestock industry.

⁶⁴ AFOs are defined as a lot or facility where animals have been, are or will be stabled or confined or fed or maintained for a total of forty-five days or more within any twelve month period, and crops, vegetation, forage growth, or post-harvest residues that are grown in place are not sustained in the normal growing season over any portion of the lot facility. (ILL. ADMIN. CODE tit. 35, § 501.225 [2005]) Very large operators are confined AFOs with more than 1,000 animal units (ILL. ADMIN. CODE tit. 35 § 502.103). Large operators are confined AFOs with at least 300 animal units that either discharge pollutants into "navigable water through a manmade ditch, flushing system or other similar manmade device" or discharge pollutants into "navigable waters which originate outside of and pass over, across, through or otherwise come into direct contact with the animals confined in the operation" (ILL. ADMIN. CODE tit. 35, § 502.104). However, IEPA may not require an AFO with less than 300 animal units to obtain an NPDES permit unless they either discharge pollutants into navigable waters "through a manmade ditch, flushing system or other similar manmade device" or discharge pollutants into "navigable waters which originate outside of and pass over, across, through or otherwise come into direct contact with the animals confined in the operation" (ILL. ADMIN. CODE tit. 35 § 502.106 [b]). In addition, no AFO is required to obtain an NPDES permit if it only discharges in the event of the 25-year, 24-hour storm event (ILL. ADMIN. CODE tit. 35 § 502.102).

⁶⁵ Even if an AFO does not fit the above definitions, IEPA may require an AFO to obtain an NPDES permit if (after an on-site inspection) an operation is determined to pose a threat to state waters (ILL. ADMIN. CODE tit. 35 § 502.106 [a]). These types of designations are also determined on a case-by-case basis.

development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the Administrator or any state under this Act shall be provided for, encouraged, and assisted by the Administrator and the States” (33 U.S.C. §1251[e]). The Act further provides that there be an “opportunity for public hearing” before any NPDES permit issues (33 U.S.C. § 1342[a]-[b]) and that a “copy of each permit application and each permit issued under this section shall be available to the public” (33 U.S.C. § 1342[j]) and that “any citizen” may bring a civil suit for violations of the Act (33 U.S.C. § 1365[a]).

In contrast, the Illinois permitting scheme provides no assurance that the public will have a meaningful role in the implementation of the CWA because it not only fails to incorporate the terms of nutrient management plans into the actual permits, it also fails to provide the public with any other means of access to them.

Second, according to the EPA CAFO Rule, Illinois had until April of 2006 to ensure all CAFOs were covered under the new permit scheme (40 C.F.R. § 123.62[e]). IEPA estimates indicate there are approximately 3,200 facilities that may need permits under current federal regulations (Diamond). Although the EPA extended the compliance dates for certain CAFOs in response to the Second Circuit holding (see 71 Fed. Reg. 6978 [Feb. 10, 2006]), all other CAFOs are required to have current permits. As of today, no new permits have been issued in Illinois and all of the permits issued prior to the most recent EPA CAFO Rule are suspected of being expired (Diamond).

Further, Illinois has inventory information for only about 30% of the estimated 500 large CAFOs in the state. Additionally, EPA Region 5 officials have revealed that

neither they nor IEPA staff knows the *actual* whereabouts of the majority of the facilities operating throughout Illinois (Diamond).

The fact the IEPA has been unable to properly assess all CAFOs in Illinois is shocking. It is unknown how many facilities are polluting, as inspections are commonly only conducted in response to complaints. It is most likely that there are many CAFOs operating without required permits. Records obtained from the IEPA in 1998 indicated that “15 out of 22...inspected lagoons in western Illinois were illegally discharging wastewater into streams” (Clean Water Network 2000:19). Although the IEPA claims these inspections were conducted only in response to complaints, more recent data from a 2001 IEPA report reveals that 52% of the facilities either contacted or visited had one or more regulatory violations (IEPA 2001). These findings indicate it is possible that over half of the 35,000 facilities in the state are discharging without any form of regulatory supervision.

The state is severely behind schedule in revising its permit program when compared to all of the other states in Region 5. While Illinois is still using outdated CAFO regulations from 1978, all of the other states have either completely revised their NPDES programs to comply with the EPA CAFO Rule or are in the final stages of enacting their revised regulations. Beyond this, Illinois does not have inventory information for the existing facilities in the state. Illinois’s failure to implement and enforce the CWA’s CAFO program is, through its own inaction, opening the door to polluters in the state.

Residents of Nora and Warren have had to find out the hard way about the loopholes and significant shortcomings in Illinois' enforcement of the CWA's CAFO provisions. After learning that EPA and IEPA staff aren't actually able to identify the exact location of the vast majority of CAFOs operating throughout the state, one exasperated Illinois resident summed it up this way: "Tell me this...*how in hell can they lose a CAFO?*"

WATER CONCERNS AT THE LOCAL LEVEL

The unique topography and geology of Jo Daviess County doesn't end with its karst, and the concern of its citizens for their water quality doesn't stop at their aquifer or their wells.

Jo Daviess is located in the "Driftless Area" of the Upper Midwest. The area takes its name from the fact that it escaped the continental glaciers approximately 12,000 years ago. Glaciers encircled this region, but did not pass over the land⁶⁶. When nearby glaciers began to thaw, their water flowed into Northwest Illinois. This erosion carved a series of deep valleys into the bedrock formations of the Mississippi River Valley, which now drains the entire region.

Over 1,600 miles of rivers, streams, and shorelines run through the Illinois portion of the Driftless Area, most of them in Jo Daviess County. The three major streams in the

⁶⁶ The region may have been unaffected by glaciers, but it was not unaltered. For example, the stream reversal at Apple River Canyon State Park is a result of effects of the Illinois Episode Glacier.

region are the Plum River, Apple River, and the Galena River. Seven stream segments in the Driftless Area are acknowledged to be Biologically Significant Streams as they sustain populations of threatened or endangered species and/or have high mussel and fish diversity. Found almost solely in Jo Daviess County along the Galena and Apple rivers is a very rare dolomite hill prairie community.

Three publicly-owned recreation sites are located in this region: Mississippi Palisades State Park, Apple River Canyon State Park, and Upper Mississippi River National Wildlife and Fish Refuge. The state parks are considered to include some of Illinois' most scenic landscapes. Between them the parks attract approximately 840,000 visitors annually, generating nearly \$9 million in local economic productivity. They also supply 130 jobs. The region is also home to seven nature preserves as well as thirty natural areas that feature prairies, forests, bluffs, and unique rock formations.

Because of the topographic complexity and geographical position of the area, the land within Jo Daviess County – particularly along its waterways – supports a wide diversity of species. The streams and rivers of the county provide habitat for the state-endangered river otter; their chief breeding population occupies the backwaters and tributaries of the Mississippi River in Jo Daviess County, and two adjacent counties. Eleven amphibian and 25 reptile species can be found here. This represents nearly 30% of the amphibians and 42% of the reptiles found in Illinois. These waterways are also home to the state-threatened western hognose snake and the timber rattlesnake. The waterways of the Driftless Area support 89 species of fish, 39 species of mussels, and 9 species of large crustaceans. Four state-threatened and three state-endangered mussels

have been found in the area. The lake sturgeon, western sand darter, and pallid shiner – all State-endangered fishes – are also found in the basin.

“Most of the to-do has been about Wolf creek, which ends in Apple Canyon River and eventually the Apple Canyon Lake and all that,” Ed explains. “But Stafford Creek, which starts *right* where this proposed dairy is going to be, runs right behind my house. If you go south and west, it starts actually right where Harbach’s⁶⁷ property is. And he’s going to be the major spreader if the manure.⁶⁸” Ed returns to explaining the waterways which stand to be affected if the dairy has a spill. “Stafford Creek empties into the Pecatonica⁶⁹. Right at that point there’s a split in the surface water. Stafford Creek runs north and east right behind my property and Wolf Creek goes west. The Pecatonica is a major river, and a tributary to the Rock River, which eventually leads to the Chicago waterway. We’re talking about some major inland waterways. The impact is both east *and* west,” he says. “The project stands to affect two watersheds.”

⁶⁷ Mr. Harbach is a major landowner of agricultural land in the area. He has contracted with A.J. Bos to receive manure from the dairy, which will be sprayed on the land as crop fertilizer. Mr. Harbach will also be financially compensated by Mr. Bos for agreeing to take the manure, thereby assisting Mr. Bos in disposing of his waste.

⁶⁸ Manure fertilizer run-off from agricultural operations is noted as one of the chief pollutants in waterways across the nation.

⁶⁹ The **Pecatonica River** is a tributary of the Rock River, 120 mi (193 km) long, in northern Illinois and southern Wisconsin. Rising in the hills of southwest Wisconsin, it flows south, then southeast, until it receives the East Branch Pecatonica River. After this, it flows SSE into Illinois, past Freeport, where it turns east, receiving the Sugar River in northern Winnebago County, Illinois. It joins the Rock River approximately 15 miles north of Rockford, IL. The river is the main attraction of the recently built 1,048-acre Pecatonica Wetlands Forest Preserve in Winnebago County; the forest preserve contains oxbow wetlands and bottomland forest. The river also flows past the 466-acre Pecatonica River Forest that contains a bottomland forest designated as an Illinois Natural Area. At the mouth of the Pecatonica is the 281-acre Macktown Forest Preserve.

Mike explains that the ISA spent \$40K last year on Clear Creek, which is a tributary to the apple river. They installed lunger structures on the creek, which are used to abate erosion and produces spawning habitat for many species of fish. “Right away when I heard about this, it reminded me of so many other projects I’ve fought against in Illinois, from a sportsman’s perspective,” Mike tells me. “With these sorts of things, especially environmental work, we wind up finding a lot of small victories from time to time, but then some major defeats, some crushing blows that can hurt us the most, you know?” I ask Mike about what he thinks the effect on the watershed will be if the CAFO has a manure spill. “Basically, only time is going to clean something like that up. The Exxon-Valdez is going to continue to haunt their watershed up there for who knows how long. It only takes 10 minutes for a catastrophe to take place and it could take several lifetimes for us to fix it. Since the Exxon-Valdez spill the technology may have gotten a little bit better in dealing with these kinds of things, but I don’t see that our laws have.”

As usual...politics

Pat Quinn, Lieutenant Governor of the State of Illinois

After many years of public service as an elected official, Pat Quinn was elected Lieutenant Governor of the State of Illinois in 2002 and won reelection in 2006. He is noted in political circles for his work in consumer protection, tax reform, and has long-championed giving citizens a stronger voice in government. He has also done extensive work promoting decent health care and helping members of the armed services and their families.

Mr. Quinn is also a ferocious advocate for the environment. He is the chairman of the Illinois River Coordinating Council, and also serves on the Illinois Delegation to the Great Lakes Commission, and Governor's Rural Affairs Council. Most importantly for the citizens of Jo Daviess County, Lt. Governor Quinn chairs the Mississippi River Coordinating Council.⁷⁰ The Mississippi River Coordinating Council (MRCC) was created by Illinois State Bill 2360 in 2006; the MRCC is a statewide council that will "manage the implementation of policies on the Mississippi River and its tributaries. The Council will work to review current programs, create new programs, and bring state and federal funding to the Mississippi River and its sub-watersheds."

After learning about the proposal for the mega-dairy in Nora, Mr. Quinn wrote to Marvin Schultz, Chair of the Jo Daviess County Board to express his dismay about the

⁷⁰ Excerpted from Public Act 94-0996: The legislative purpose of the MRCC: The Mississippi River is the primary water artery for the economic development of the United States. The restoration and conservation of the Mississippi River and its tributaries is in the economic and ecological interest of the citizens of this State. It is further in the public interest to establish, implement and monitor water management projects run by local, state, federal and not-for-profit entities.

proposal and to urge the County Board not to endorse the project. In his letter of February 10, 2008, Mr. Quinn wrote:

As chairman of the Mississippi River Coordinating Council, I am writing to oppose the dairy proposed by A.J. Bos and to urge the Jo Daviess County Board to vote “no” on the proposal to create a “mega-dairy” near the Apple River.

The Mississippi River Coordinating Council is a state commission established by the General Assembly and charged with the responsibility of protecting water quality of the Mississippi River watershed.

The proposed “mega-dairy,” and the animal waste lagoon that would be created by a facility of this size, would endanger area groundwater and streams. These wastes, if recycled responsibly as agricultural fertilizer, would cover a massive acreage of farmland; if concentrated over a smaller area, the over-application would result in serious environmental hazards. When runoff carries animal wastes into streams, the nutrients in the wastes promote excessive algae growth that dramatically alters the biological environment. In some cases, the algae overgrowth lowers oxygen levels, causing fish kills.

This proposal would place the “mega-dairy” at the headwaters of the Apple River, which is designated as a biologically significant stream by the State of Illinois. Within the county, the state also recognizes the Driftless Area as a Resource-Rich Area. The area also is part of a regional U.S. Fish and Wildlife Service National Fish Habitat Initiative.

Jo Daviess County is a tremendous resource for our state. Tourism and outdoor recreation opportunities in the county create jobs and yield long-term economic benefits. The businesses and the residents of Jo Daviess County are counting on you to protect the beautiful, healthy environment around the Apple River and ensure that your county remains an attractive tourism destination and a pleasant, wholesome place for families to enjoy the great outdoors.

Because I believe this proposed “mega-dairy” will harm the environment and the economy of Jo Daviess County, I hope you will vote “no” on the A.J. Bos proposal.⁷¹

The Lt. Governor also forwarded copies of his letter to State Senator Todd Sieben⁷² and State Representative Jim Sacia.

⁷¹ Letter from Lt. Governor Pat Quinn to Mr. Marvin Schultz, of the Jo Daviess County Board.

⁷² Senator Sieben has since retired. Mr. Tim Bivens has been appointed to serve out the rest of Mr. Sieben’s term of office,

Jim Sacia, State Representative of the 89th District of Illinois

State Representative Jim Sacia has represented Warren and Nora since 2003. Jim spent seven years in the military and then went on to a career with the FBI which lasted just short of 30 years. He currently serves as the President and CEO of NITE Equipment Inc., a well-sized tractor and heavy equipment sales company, a family business which he built with his wife and the oldest of his three sons. Jim has been married for 38 years, is a “lifelong Republican,” and boasts an impressive number of civic and professional affiliations and commendations. He lives in Pecatonica which is in Winnebago County, approximately 40 miles southeast of Nora.

Jim refers to himself as “a farm boy who grew up milking 35 cows near Lacrosse, Wisconsin.” He tells me that when it comes to the dairy industry, “those roots are deep” for him. “I have a belief in land and in soil, and in dairy farmers,” he says. In one of his articles he wrote, “I was born and raised on a dairy farm and I have great empathy and appreciation for the industry. I still farm as a vocation today; my heart is there.” His record in the Illinois House – including his introduction and support of enacting legislation extending a federal farm subsidy program for dairy farmers – is just one example.

He is also a man who is not shy about letting people know where he stands on an issue. Jim writes a weekly newspaper op-ed column that is distributed to and published by area newspapers in Northwest Illinois. On December 10, 2007 Jim wrote what would turn out to be the first of many pieces about the dairy farm in Jo Daviess.

“The two potential 4000 plus dairy cow herds coming to Jo Daviess County has generated numerous calls and emails to my office. As with so many significant issues I am requested to take a stand. Most calls have been in opposition to them.”

The rumor mill is in full swing; my favorite is a woman showering near one of these large dairies in California who is suddenly having liquid manure coming out of the shower head as her well has been contaminated.”

In that first article, Jim gave his opinion that the dairy presented:

“a rare opportunity for quality economic development and I hope we don’t shoot ourselves in the foot. The admiration I hold for the Scheiders and Scheidairy Farms and the Blocks with Hunter Haven Farms⁷³, both milking over 700 cows each, producing enough electricity with their methane digesters to furnish all the electric needs for 125 homes each are exceptional examples of good neighbor dairy farms. Yes, the proposal (for Nora) is several times larger, but let’s hear it out and give it a chance before the rumor mill takes over.”

Jim has been outspoken in his support of the proposal for the Tradition Family Dairy facility and also for A.J. Bos. His articles featuring the dairy and Mr. Bos are indicative of this. For example:

“There is little doubt that the family making the proposal is engaged in dairy farming in California and certainly knows what they are doing.”⁷⁴

“On Thursday, January 31, 2008, I met with A J Bos, the third generation dairy farmer from California who is making the proposal. A J is an impressive young man with a wife and four children. He certainly was not the villain filled with corporate greed that some had portrayed. My opinion is he is a good solid family man with every concern and value that we share in Northwest Illinois.”⁷⁵

Jim is very concerned about the ever-decreasing number of dairy cows in the region. He explains that less than ten years ago this region of the state had 7,000 more cows than it does now. Jim sees the construction of the Bos dairy as an opportunity to “bring dairy cattle to a dairy county.” He describes the area around the proposed dairy site as “livestock country. The county is full of rolling, hilly land,” a topography which does not lend itself to the flat expanses of land needed to grow crops. “This is pasture

⁷³ Both facilities are located in Northwest Illinois.

⁷⁴ Sacia, 12/10/07

⁷⁵ Sacia, 2/1/08

land,” he says. In an interview with the Rockford Register-Star, he emphasized not only the economic boon that he believes the dairy would be for the immediate region, but also the economic importance of promoting Illinois as a livestock-friendly state. He believes that the construction of Tradition Family Dairy is just the thing the state needs send just that message. “We aren’t saying as a state, ‘Livestock go away.’”

In his time in office Jim has seen other opportunities for “quality economic development” in his district come and go without fruition. Last year a proposed expansion for a coal gasification plant was put on hold “to the great loss of Jo Daviess County.” Before that, the discovery of an endangered plant, James’ clammy-weed, derailed the construction and opening of Thompson Prison. “When that happened, we lost a tremendous economic engine.” He is adamant that this dairy not suffer the same fate.

His outspoken support for the dairy has made him less-than popular with his constituents fighting the Bos proposal. “I’ve become a lightning rod for this issue,” he says. Jim is aware that the dairy has become a truly divisive issue in the community. He knows “This is a major change to an area. This is very different than what Jo Daviess county feel that they’re used to. He tells me, “You’ve got those environmentalists out there. They’re worried about their air quality and that this will destroy their water quality. They’re saying that it will destroy tourism in Northwest Illinois.” He tells me emphatically, “I *totally* disagree with them. CAFOs *can* operate in concert with their surroundings and with their communities.” In an interview with the Rockford Register Star, Jim explained, “It’s the old ‘not in my backyard’ thing. That what the issue really is.”

Jim and his wife, Jenny spent their 38th wedding anniversary in Nevada, and drove from there to Bakersfield, California to tour two mega-dairies similar to what A.J. Bos is proposing for the site in Nora. “To say that we were impressed would be an understatement.” He thinks that anyone interested in the proposal for Nora should visit these facilities, “especially those opposed to the project, absolutely should visit.” They spent about two hours touring the first facility, which holds 7,000 Holsteins, and is owned by a friend of the Bos family. They spent the rest of the day on a site with 6000 cows, owned by A.J. Bos’ family. “I had never before seen moving carousels for milking cows, so walking inside this facility and seeing two revolving at a time was a sight to behold.”

Jim told me that the facilities he’d visited “didn’t smell. There was no offensive odor.” Indeed, the week he returned he wrote a column titled, Fear driving the debate on mega-farm, which had a by-line stating ‘FEAR = FALSE EVIDENCE APPEARING REAL.’ In his column that week, Jim explained that the dairies he’d visited in California were “no different from a typical dairy farm here in Northwest Illinois. That’s very contrary to what many of you have been hearing. In fact, we were very impressed with the unbelievable cleanliness of the facility.”

Over the course of the past several months, Jim has visited nine large-scale dairy operations, ranging in size from 3,500 cows on up. He’s been to dairies in Indiana, Oregon, California, and Illinois. “I have concluded that large dairies built in the past 10 years are environmentally far more sound than traditional dairies.” He also has been in

contact with Dr. Frank Mitloehner⁷⁶, an air quality extension specialist at the University of California Davis' Department of Animal Science. In a letter to Representative Sacia, Dr. Mitloehner stated:

“In general terms, in my opinion a dairy with 10,000 cows does not equate to the impacts of ten dairies with 1,000 cows each or 100 dairies with 100 cows each. The large dairy will have greater resources to allocate to environmental or welfare issues. Large dairies generally have professional consultants that help these operations with custom tailored services resulting in economies of scale and improved efficiencies.

Large dairies have better capacities to control waste streams than small operations. For example, a dairy with 10,000 cows generally has a nutrient management plan, sealed waste storage lagoons, a nutrient application plan. A small operation (let's say with pasture housing) produces waste streams that are generally much less controlled (e.g. dairies on pasture).

...However, there is a public perception that 'mega-dairies' are much more detrimental to the environment and society than small, family owned dairies. A 10,000 head dairy reminds many folks of a factory; thus the name factory farming. To comment on this is not up to a scientist like me, but I want to raise that it is very important to educate the public on true and perceived aspects of modern dairying.”

Jim has also been to visit Threemile Canyon Farm in Oregon. He calls the accusations and concerns regarding the Threemile dairies “hogwash,” and the contention that Three Mile Canyon Farm “is the third largest ammonia polluter in the nation,⁷⁷” a “myth.” Jim tells me that investigators from OSHA spent a week with a boat in the center of the manure lagoon at Threemile Farm and found that all three dairies are “well within

⁷⁶ Dr. Mitloehner finished his PhD in Animal Science at Texas Tech University in 2000. His current research activities are in two main areas: first, air quality research related to livestock production; second focus is on environmental physiology research, focusing on effects of air emissions on animal health and welfare.

⁷⁷ As noted above, they are cited by the EPA as being, in fact, the single-largest producer of ammonia pollution in the country.

compliance of both State of Oregon and national EPA standards.” The author notes, however, that one does not necessarily contradict the other. It is totally possible that the Threemile facilities are in compliance with state and Federal environmental standards – especially given how slipshod and lenient those standards are prone to be when it comes to agriculture. It does not mean that the Threemile farms are, through compliance, not capable of being the largest emitter of ammonia pollutants in the country.

Jim also points out that the Threemile Canyon Farms are eight miles away from Mt. St. Helens, and three miles away from a decades-old coal-fired power generation plant, and that these two sources contribute far more to the area’s environmental degradation issues than does the Threemile Dairy. Jim says that the concerns raised about pollution at the Threemile farms are “outlandish allegations.” He believes that the facilities that he toured at Threemile Canyon Farms show them to be “one of the finest operations in the nation.” Well aware that there are those in his district who would vehemently disagree with him, Jim says, “Have *they* visited? I have. I have been there. It is a quality operation.”

In a radio interview subsequent to the Lt. Governor’s letter being received by Mr. Schultz, and the Jo Daviess Board voting down the proposal, Representative Sacia commented on the Lt. Governor’s letter:

“These things (industrial dairies) are totally in sync today with the environment....They (their owners and managers) are concerned, and know how to deal with groundwater issues. Initially, I met with a group in the Warren-Nora area who was opposed to this mega-dairy, and many of them have legitimate concerns... You will hear people tell you that ‘we’re going to ruin our tourism in Northwest Illinois.’ Wrong...quite to the contrary. ‘Land values are going to be depreciated.’ Wrong. Visit Bakersfield, California; beautiful, beautiful homes

surrounding these dairies...Some of those opposed have really gone the extra mile to scare people... These are the kinds of tactics that we're running into, and I really find it a tremendous frustration.

I think we have an opportunity here for some quality economic development but like with any issue there will be those that will do anything they can to kill it...I pride myself on working very hard as a State Representative, and I don't think I would be right at all if I didn't get first-hand knowledge. I mean, I have learned that anybody can go to the internet and you can find something to prove your case, be it wrong or be it correct.⁷⁸ I just absolutely believe that you have to get the knowledge first hand and up front⁷⁹. I feel it's incumbent upon me to do that...

The Jo Daviess Board did vote it down by a vote of 11-5 and sadly they did it on the day that they received what I believe was literally a scare letter from Lt. Governor Quinn who *told* them to vote no. The Lt. Governor did not consult with Sen. Sieben; he did not consult with me. He simply had been told by several from the 'anti' group in Northwest Illinois that this was a horrible mistake. And many on the Jo Daviess County Board reacted to it. But here's the reality: the ILMFA passed in 1996 make it a *State* issue. In other words, the County Board's decision is *advisory*."

The interviewer then went on to ask "Isn't part of the problem that we have the 'family farmer' mentality? We have that yearning for the continuation of the family farm, and we see this as corporate America encroaching on the family farm dream?" Mr. Sacia replied:

"You are so right. You're talking to a boy who grew up on the family farm. We milked 35 cows. I grew up every day, 365 days a year, and spreading manure on our land. We had hilly ground and we would spread it all over on the hilltops in the winter. And in the spring, probably half of it ran into the creeks. These dairy men of today would never allow anything like that to happen.

⁷⁸ In his newspaper column on March 30, 2008, Representative Sacia wrote, "In my research I have intentionally avoided the internet as a source of information." The author concurs with Mr. Sacia that the internet should not be utilized as one's sole source of information, and that a good deal of information available online is unreliable. The author also respectfully submits that included in the information available online are a number of highly credible sources of information regarding CAFOs, including but not limited to the United States EPA, the US DOA, the OSHA, the Army Corps of Engineers, the US FWS, the US DOI, as well as the offices of environment, agriculture, health, and natural resources for every state in the union.

⁷⁹ The author respectfully notes that to the best of her knowledge, Representative Sacia has *not* traveled to any area of the country that has experienced any adverse environmental effects resulting from a manure spill.

But you hit it right on the head. I have people tell me all the time, ‘We support the family farm. We support the small guy.’ But the reality is that the only family farmer who can make it on 30 cows today is somebody who’s retired and has a backup income. It just simply cannot be done. I applaud these large dairies...I assure you that the agriculture community of Northwest Illinois is truly embracing the proposal of Mr. Bos. It’s an opportunity for them to sell many of their commodities and products to him; to work in concert with him. I think it’s just a great economic opportunity, if you will, for the Northwest Illinois area. There are those that just take huge issue with me and feel that I’ve ‘sold them out’ and all I’m doing is trying to be fair and objective. I would love to see the small family farmer make a living today. Reality is, you can’t milk 30 cows and make a living.”

On April 8, 2008 the Democratic Party announced that Walter Johnson had entered the race for state representative in the 89th District to oppose the incumbent Jim Sacia, who will be seeking a third term.

In an interview with the Rockford register Star, Johnson suggested that his decision to run against Sacia had a great deal to do with Sacia’s stance on A.J. Bos’ 1,400-acre dairy farm in Nora. Johnson says, “It (the decision to run) was just that it is a change for Illinois.⁸⁰” In the same article, Sacia said he had been informed of the filing but didn’t know much about his opponent. “Somebody called me last night that watches the (State Board of Elections) Web site and said, ‘Do you know you’ve got an opponent?’ I said, ‘I don’t know.’ It’s good. I welcome the challenge,” he said.

⁸⁰ In follow-up with Mr. Johnson, he expanded for me his concerns regarding the mega-dairy. “I am opposed to the mega-dairy. I have met with people and talked and listened to them; the environmental concerns are the main topics they present to me. ‘Can you guarantee that nothing will happen with the run-off of waste or with the methane that will be released into the air?’ They’ve brought up in great detail the issue of insects and pests that will affect this farm. I also share their concern that that the mega-farm will hurt the small to medium farmers in the area.” Mr. Johnson hopes to be “the voice for the people in my district, to listen to their concerns and issues. The people will tell me what they would like to be done.” Thinking again about the environmental concerns that have been raised for the county, Mr. Johnson comments, “This has to be stopped.....to preserve a land of beauty for our children.”

Representative Sacia stands firm on his opinion that the Tradition Family Dairy will be a great economic boon to the district, and that he trusts A.J. Bos and believes that he'll do right by Jo Daviess County. "These folks do their 'due diligence' and I would welcome them in my backyard," Jim wrote in a column this March. "Because most of the information I have reported to date has been positive, I have been portrayed by some as a surrogate for A.J. Bos. Sorry folks, Jim Sacia has never been nor will he ever be for sale. It is also an insult to Mr. Bos to make such an insinuation."

Jim knows that people are angry with him, and upset about the dairy. He knows that there's an election coming up, and that the dairy will be a key issue when people go to the polls this November. "You know," he tells me, "I was looking for work when I found this job."

Jane McBride, Senior Assistant Attorney General of the Environmental Bureau of the Office of the Illinois Attorney General

Jane McBride has a quiet voice, and is thoughtful when she speaks. "It's not unusual for this office to be contacted by citizens during these siting processes because it's the nature of the game."

Jane's has served in her position at for eleven years. Her work at the Attorney General's office is largely focused on environmental enforcement relative to agriculture facilities. She received the Marovitz Public Interest Award in 2008 for her work - public, private, and pro-bono - benefitting public and animal health and safety. This is not the first CAFO she's encountered in her career, and not likely to be the last. "They (citizens) are

concerned; they come across CAFOs rather quickly, and they tend to contact any official that might be on the radar. So, we quite often get inquiries about it.”

Representatives from HOMES contacted the Attorney General’s last year when the initial notice of intent to construct was received by the neighbors. They have stayed in touch with the Attorney General’s office throughout the course of this project, in particular with Jane McBride who was the person to whom the issue was referred. “We understand the position they’re in, as the citizens. They’re reacting to a situation and we’ve been open to their communication.”

I ask Ms. McBride, in her experience, how communities usually respond to CAFOs being constructed. “They learn of the situation. The way that our siting statute works – the ILFMA - there’s going to be a certain amount of time before the neighbors within a certain setback radius are going to be notified. When that happens, the projects are pretty much designed, properties have been purchased and that kind of thing before the neighbors – the citizens – are made aware of it. And so, they’re on a pretty quick timeframe to then get up speed on the project and respond. And so when they *do* figure out what’s going on quite often they start contacting public officials, everyone they can possibly think of, seeking assistance and voicing objections. Our office, just like many of the other offices of public officials, is being contacted by the neighbor-citizens.” I ask her if there are broad contrasts between the citizen groups that she’s worked with in Illinois regarding CAFOs. ““The groups probably are extremely similar. I go through the same thing with many of these CAFOs that go in. We had a series of these (CAFOs) go in, but not of this size. Part of the big issue here is the size of this thing and where it’s going.”

When I ask her about her experience with HOMES in particular, she responds, “This is a pretty active group. They’ve got some pretty sophisticated members in this group; former state employees and lots of farmers. The difference in this case is that you’ve got a number of folks who have relocated out there from the Chicago area. There are businessmen in this group that are a little more cosmopolitan in some regards than some of the other groups.”

I don’t ask Ms. McBride if she personally is in support of CAFOs in general. I also don’t ask about her personal opinion about the Tradition Family Dairy proposal for Nora. Regardless of what she might think about *CAFOs*, during the course of our conversation it becomes obvious that Jane McBride has a great deal of respect for the hard work *people* in communities will do in an effort to fight off a CAFO in their area. “In *every* single one of these groups there’s been, well, it’s just amazing how quickly they get themselves organized and how they get the tasks divvied up between them. Somebody’s handling the press, and somebody’s the spokesman, somebody’s handling the technical side and somebody’s the government relationships. It’s *just amazing* how well they do on such a short amount of time. This group has done the same thing. They really get themselves together quite quickly. They have to, admits Ms. McBride. “They have to because the CAFO siting process moves right along.”

Jane explains the role of the attorney general’s office in this situation. ““We’re the legal office for the state, so we have broad authorities. That’s one reason the citizens have continued to contact us. Actually, we’ve been very straight with them about the true nature of what are or are not able to do. I know that their attorney has talked to them about that, as well.” She continues, “We’ve sent them (HOMES) letters and as we’ve

explained, we really don't have a formal or any kind of specific authority under the statute.⁸¹ However, we do have our various public interest abilities to review a situation or look at a situation and from the various statutes that give us authority to act we can review it to see if it does merit some kind of legal action. Under the common law theories or under specific statues for the Attorney General's office, (we are allowed) to act in the treat of imminent pollution and that kind of thing. So, if we wanted to try to look at the authorities we have and take action on that, it might be something we can look at."

The Attorney General's office, to date, has not gotten heavily involved in the siting of any CAFO in Illinois. "We've never gotten involved formally in any of these siting provisions or siting cases. We looked at them, we've reviewed them; we've made determinations in other cases *not to* (become involved) because we didn't feel that it was merited. But that's not to say that every instance doesn't present different facts, different evidence, and different scenarios."

The sheer size of the Bos dairy may compel the office of the Attorney General to reconsider their customary "hands off" position on CAFOs. "This is an *awfully* big facility. It's the biggest one that's ever been proposed for Illinois, and we do have environmental concerns out there. So, it's again something that we can look at. But as we've written to the citizens, it's not something that we've ever done, and so we told them 'we're *really* not a part of this process' but because we do have a strong public interest charge, as the State and the Attorney General does, we have kept track of what's going on."

It goes without saying that one of the key issues that HOMES addressed to Ms. McBride was the subject of karst on the site, and the group's belief that the question

⁸¹ The ILFMA

regarding the geology of Mr. Bos' property had - along with Sam Panno's reports - not been adequately addressed in the construction application.

“We did send a letter to the Department of Ag; we FOIAed⁸² the file to see what kind of information had been garnered and at point we didn't see that the karst issue had been dealt with. We did have inklings that there was a deadline coming up so we did write a letter asking the IDOA to be sure to avail itself of the state geologist, and we copied the letter to IDNR⁸³. In response, Sam Panno submitted one of his reports, and he wrote that given the limited time schedule, this was all the information he could provide. So we sent an additional letter at that point indicating that IDOA should take the fact that Sam needed additional time into consideration, and to delay their decision until Sam could get a fuller report in to them.⁸⁴”

⁸² FOIA is the acronym for “Freedom of Information Act”

⁸³ Illinois Department of Natural Resources

⁸⁴ Jane McBride is being discrete and exceedingly diplomatic. Although she doesn't mention it to me at all, the author is aware that Ms. McBride's correspondence and FOIA request hit quite a nerve in the Illinois Department of Agriculture which resulted in an acrimonious reply from Margaret van Dijk, Chief Legal Council and Ethics Officer of the IDOA.⁸⁴ In a response letter dated February 27, 2008 addressed to Jane McBride, Ms. van Dijk replied:

It is premature, if not inappropriate, for you to make requests of other state agencies on behalf of the Department of Agriculture. Examination of the statute⁸⁴ does not reveal a joint review process between the Illinois Attorney General's Office and the IDOA. The legislature has assigned to the Department the role of reviewing applications and determining whether they meet the requirements of the statute, and with respect, intervention on your part in the decision making process is improper. It is the Department, not the Attorney General, who has the expertise necessary to carry out the duties set forth in the statute and to protect the interests of the people....As you know, our offices have worked hard at maintaining a positive working relationship and, perhaps, a telephone call would provide you with the desired information and eliminate the need for us to expend limited resources exchanging formal correspondence.... Your sense of urgency with regard to the issues you included in your correspondence is unwarranted in this instance.

Ms. van Dijk sent copies of the letter to Warren Goetsch and Jared Thornley⁸⁴ at the IDOA. She also sent the letter to Ann Spillane, who serves as the Attorney General's Chief of Staff. In the time following the receipt of this letter by the Attorney General's Office, Ms. van Dijk has since resigned from her position.

Ms. McBride has never personally worked with Mr. Panno, but their office regularly coordinates with state geologists on a variety of projects. “Illinois has a phenomenal set up of scientists with the state geological survey and the state water survey and the state history survey. These people are incredible resources. I don’t think we use them enough. Not every state has something like that so these folks are available.

But Panno’s name actually came up in the course of the public hearing and the public record, because Panno has such an *incredible* reputation for his work in karst. I think Warren⁸⁵ in the Department of Ag is even the one who referenced him at one point. We, in our letter, had just simply referenced the ISGS and the Illinois Water Survey because that seemed the logical scientific branch to look at something like that, and Panno is part of those agencies. I think Warren is the one who started talking about Panno when people started talking about karst.”

Not even Jane McBride can escape the karst question. I explain to Jane McBride that in my conversations with citizens in Nora and Warren, one of the things they are most concerned about is the geologic reports prepared by Sam Panno and other State experts (whose work they feel bolsters their position) are being improperly and purposefully ignored by the IDOA. Ms. McBride responds, “It’s hard to say that it’s being ignored when we don’t yet have a decision by IDOA. And I can’t say it’s being ignored because I think even the citizens see that they IDOA has asked them (Bos’ engineers) to go out and do some additional drilling. It (IDOA) has not issued a decision yet. So as far as it being ignored, in the definition of the word ‘ignored’, I don’t think it’s being ignored. To their (the citizens opposing the dairy) satisfaction it would probably be ‘Look its karst,’ and Ag would deny the application. I think that’s what they feel should

⁸⁵ Warren Goetsch

happen here. But that's not how the statute reads. If its karst, there are supposed to be certain protections put in place. But that's a professional call as well, so the IDOA is going to ultimately decide as to what is appropriate with this site."

Ms. McBride also points out that the Attorney General's Office is not the only agency through which the citizens of Nora and Warren can seek relief. "They also have the option to be in touch with the other agencies, such as the IEPA, the US EPA, and the DNR⁸⁶ to a certain extent. The DNR has property right there. They (HOMES) have been in contact with all of those agencies." Returning to what the role of the Attorney General might be in this situation she remarks, "We do have pretty general public interest authorities which can perhaps take a different kind of action than the Lieutenant Governor can."

Ms. McBride also mentions contacting the IEPA. "The Illinois EPA as well...if they feel there's an imminent threat they can look at it." And then, there's the rub. "Whether they (IEPA) will attempt to invoke their authority or not is another thing, as to whether they feel that they are sound, legally, in doing so. It's the same exercise we go through."

"This dairy is the largest we've seen in the state," explains Jane McBride. "Given the proposal for what it is – that many animals – located at the site that it is, it's something that merits the kind of attention it's getting. I think for the citizens, it's put a lot of pressure on them. It's put a lot of pressure on that community as these siting procedures generally do." She takes a deep breath and tells me, "It's very hard on the communities...very hard on them."

⁸⁶ Illinois Department of Natural Resources

Sticks and Stones

Community resistance to CAFOs is time and again portrayed as choice between food and a mulish not-in-my-backyard way of thinking.

The people with whom I spoke that were supportive of the CAFO being constructed in Nora have beliefs equivalent to others who share their opinion, all over the nation. The reasons and rhetoric of CAFO proponents is always alike. They argue that industrialized agriculture is inevitable; that this *is* the future of dairy farming; that as a country we have an ever-increasing number of mouths to feed. They aver that if we need to continue to feed so many people, CAFOs are the sensible option, especially because they have a succinctness and economy of scale. These facilities can't be fought forever, and people are just going to have to get used to it. "People want (low-priced) food and then they are opposed to CAFOs or other animal agriculture. It doesn't make sense. Part of the reason (for CAFOs) is to keep up with worldwide market demand; we need farms and businesses that are economically viable," one supporter told me. "There's no way to do have both (CAFOs and inexpensive food) without significantly raising taxes and a whole bunch of subsidies to smaller farms." In a broad overview about the basic economics of CAFOs, another supporter explained, "Oh, *if only* you knew. *If only* you understood the larger world (dairy) market and how it powers the rural and local market."

There is merit to this argument. Americans have grown used to having a wide range of food choices and buying them at comparatively low prices. Moreover, we have grown used to being able to buy almost any food we want, regardless of the growing

season. That's easy to spot every day, all around us. Here in Cambridge, chicken legs in my local chain grocery store are \$.99 per pound. Blueberries – which in point of fact don't come into season in Massachusetts until mid-July – are generously stacked in 4 oz. boxes on an end cap in the produce section. The grocery store is part of a enormous national chain. In supermarkets all around Boston and all around the country, untold pounds of \$.99 chicken legs will be sold this week. Next week, something else will be “on special” at the store; eye-of-round, maybe. Thousands of chicken legs and of course, millions of gallons of milk; investigating where your food comes from is usually not on the top of the grocery list. Moreover, being selective about where your food comes from is an expensive pastime. Organic milk this week is 68% more expensive than the same amount of everyday milk; bags of organic baby carrots are 61% more expensive than their conventionally-grown counterparts. Being picky about how your food is produced is a luxury.

In both the political arena and private sector, interested parties are ardently promoting general agriculture in Illinois, looking for ways to encourage growth in a lagging industry. Proponents of Tradition Family Dairy are also sensitive to the fact that the state's agricultural industry has seen better days, the dairy sector included. In Jo Daviess County alone they've lost over 7000 cows in less than ten years. They want Illinois to seem agriculture-friendly to potential investors and people who might want to bring agriculture into the state. Supporters of this dairy and CAFOs in Illinois specifically, reiterate that this type of large-scale agriculture is our future and should be encouraged. They see it as a potential boon to the local economy and also to mega-dairies

and similarly-scaled livestock facilities in Illinois, helping the state reestablish its foothold as an agriculture-friendly place.

Supporters of the mega-dairy in Nora regularly tout the aspects of this project that are assumed to be economically beneficial to this community. Nora is a very small rural community, and like any other area with a dwindling population and tax base, suffers from extreme economic strains. Predictably, those in favor of the dairy predict a creation of jobs and the boost to a tax base when that occurs. Others will argue that these are phantom economics, a sort of shell game, and will not benefit anybody who actually lives in the area. For example, large-scale operators they tend to buy more inputs and do more business outside the community, which raises a specific type of economic concerns.

**We milk the cow of the world, and as we do, we whisper in her ear,
'You are not true.'**⁸⁷

Admittedly, there are benefits, but the question remains: *who* will it benefit? This dairy will provide a number of fairly low-wage jobs, as I understand it. Whether or not local community members will take those jobs is a question, because we know in facilities of this type around the country that local community members don't take the jobs. It can benefit, for example, local farmers, who will take the manure, and use it as fertilizer, if they use it correctly. There will also be some economic benefit to local communities and to the local area. The question is not whether or not those kinds of benefits will or not occur; the argument is about the *extent* to which those benefits will occur in a local area. First, how do you measure those kinds of internalized economic variables, the standard economics where you measuring jobs, tax base, wages, and the like? Second, how do you compare that to the costs, which are externalized to the facility? The costs in terms of social upheaval, the costs in terms of environmental degradation, the costs in terms of the displacement of dairy producers in a larger region, which will assuredly happen, because we know that's the pattern when these CAFOs enter a community. So it's a matter of looking at situating the benefits, some would argue a fairly narrow range of benefits but which nevertheless do in fact exist, and examining them within the context of environmental public health cost as well as the larger consequence for the decline in dairy producers as a whole

One person I interviewed made the following observation: "You can take a million dollars, or ten million dollars, and you can invest it in any community in the

⁸⁷ Richard Wilbur, *Epistemology*

Midwest that you want, and it's going to have an economic benefit to that community, there's no question about it. But you're going to take that money away from other areas with dairy producers in Wisconsin, Iowa, and Minnesota."

What is transpiring in industrial agriculture is not a response to an increased demand of milk, or an increased demand of meat. Rather, there is a phenomenon of a lateral shift in who does the production, and therefore who benefits from that production. These kinds of considerations need to be entered in to the overarching equation about what the economic benefits are.

In this particular case, if one is to believe what the residents of Warren and Nora are telling me and if I understand it correctly, there are, quite literally, only three or four farmers locally who will benefit from this dairy, because they're getting paid to take manure. Then you have the remainder of the people in the community; in a combine population of approximately 1800 people, three or four people simply cannot be seen as a large sub-population of a group. One observer takes this question one step further and candidly says, "I'm confused about how an installation which stands to benefit, really, kind of, three or four people, has, in fact, generated support within the community *beyond* those three or four people."

It must be asked if there has ever been an installation of a facility like this and on this type of scale within the United States, or anywhere for that matter, actually worked out well. Has the arrival of a CAFO ever turned out to be beneficial? Has there ever been a CAFO which, as a business it actually worked out and it wasn't the unraveling of the community's fabric? I asked Dr Thu if he was able to provide me with an example somewhere of someplace that a facility like this has been sited and is considered as and

that it's generally beneficial for everybody. He replied unequivocally, that "If you're talking about a 12,000 head dairy facility, I'm not aware of where it's been accepted in the community, carte blanche, and people have flocked to it and welcomed it with open arms. I don't know that -- they might exist, but I certainly don't know of it." Given the fact that Dr. Thu has studied CAFOs for many years, both across the United States and northern Europe that response tells you something significant. Still, local supporters tell me again and again about feeding the planet and keeping food affordable. "We keep this food supply safe and relatively inexpensive if you look around the world," Steve Bos said. "People are afraid of the unknown."

The often-touted proposal that CAFO-scale agribusiness is the future of farming is appalling to him. He considers it the biggest lie that's perpetuated in modern agriculture today. "Look at what's happening in the world today, and look at the extent of hunger in the world in the aftermath of a "green revolution" following World War II. As so-called productivity in agriculture increases in the U.S., what impact has that had on world hunger? Look today at the global hunger crisis that we're enduring right now. Companies like ConAgra and Continental Grain, and other companies that are involved in these industrial-scale agricultural activities -- they're *not* there to feed people. That's not the purpose. Bos is not in business to feed people. They're there to make money." He continues, "They're not interested in, selling their product to people that don't have the money to buy it."

There are countless millions of people around the planet who make less than two dollars a day. Economically, these millions are useless to mega-agriculture, because these large-scale businesses can't make money off of these people. If this is true, the premise that

Mr. Bos and his dairy CAFOs are responding to an increased demand and feeding the world is absurd on its face.

Dr. Thus explains that the unyielding chanting of “feeding the world, one CAFO at a time is a mantra that agri-business invoked, and has been promoted in conjunction with the building of these facilities for some time. But the mantra “simply belies the facts, and anyone who looks at productivity and hunger would see through that mythology. It’s so falsely premised, and yet it gets touted frequently, and unfortunately the premise is simply ungrounded.”

Over the months that have passed since Mr. Bos first arrived in Jo Daviess County, a number of articles, editorials, and public comments made by elected officials in Jo Daviess have been vehement in their assertions that opponents of Tradition Family Dairy are *anti-agriculture*. An April 2008 editorial in the Chicago Tribune opined that “there are all sorts of businesses that most people would rather not have next door... (but) this type of operation serves valuable economic needs that argue for allowing it somewhere.” This time, Nora, Illinois is that “somewhere.” The same Tribune editorial supporting the dairy proposed for Nora charged that the opponents are seeking to “freeze development to uphold their aesthetic preferences.” In a particularly strongly-worded editorial in February 2008, Dan Stevens, editor and publisher of the locally-published *Village Voices* and *Freeport Focus*,⁸⁸ wrote:

We aren't hearing arguments about the dairy. Instead what I'm hearing and seeing is emotion running rampant, lies being sworn as facts, and the most truly

⁸⁸ Both publications are located in Northwest Illinois. Each has a circulation less than 4000.

appalling fear tactics I've ever witnessed....The HOMES acronym was a really good idea in my book when I first saw it, but it has devolved into...nothing more than a hate group. (Hated of Modernization Entering Society) Do the members of HOMES... realize that you're being compared to a hate group as if you were Neo-Nazis?...Lose the hatred, lose the fear, lose the tactics that are ripping our community apart...Use the common sense God gave you.

Although the members of HOMES were stung by this article – many of whom know Mr. Stevens personally – one of the members was particularly offended: he had, in fact, lost many of his family in the concentration camps.

It turns out that Mr. Stevens had spent the day in Freeport, IL a few days before this article was published. As a member of State Representative Jim Sacia's Agriculture Advisory Committee, he'd spent Saturday, February 2, 2008 with Rep. Sacia and 35 other members of the Advisory Committee at the Beltline Café. The committee members spent their Saturday morning being personally introduced to A.J. Bos, and hearing Mr. Bos' presentation about his plans for the 1,400 acres he'd bought in Nora.

One resident tells me, "there are people that will say to me, 'Bev, it's the way of the future. These CAFO are the way it's going to be.' Well, maybe so, and I won't argue that. As I've said to you, I don't know that much about what the wave of the agricultural thing is. There's arguments, you know. I'm not a PETA. I'm not a big animal lover, but like I said, there's arguments on those things. I'm not into all that, but I said it doesn't take a rocket scientist."

Those in favor of the dairy have strong feeling for their neighbors who are working to derail the project. They describe opponents as interloping folks from Chicago who have moved to the area and with their city sensibilities and ‘liberal politics’ it is obvious that they don’t understand the culture of the community at all. They describe them as ‘those environmentalists out there’ who are trying to force their own agenda down everyone else’s throat. They assert that those challenging the dairy are hardhearted about the impact of dwindling Illinois agriculture has on the culture and economy of the state.

Politically in Illinois – as is true in any Grainbelt state – to be labeled as anti-agriculture is the equivalent of a death knell for one’s career. It is a slur of significant political consequence; a scarlet ‘Ag’. It was inevitable that accusations of being anti-agriculture would be made eventually. It’s a powerful statement which openly undermines the credibility of the organization and goes a long way in the local press. One interviewee said plainly, “It’s like he has done his very utmost best to try to demean anything that that group did to make them sound like they were, you know, a bunch of liars, just a bunch of crazy people.”

To put it mildly, members of HOMES are flabbergasted by the mix-and-match labels – which are usually completely inaccurate – being used to disparage and discredit them. They’ve been relegated to being anti-agriculture-anti-economic-development-ultra-liberal-interloping-tree-hugging-elitist-enemy-of-family-farm-must-be-a-bunch-of-vegetarian-granola-crunching-anti-farmer--animal-rights-freaks-and-hysterics-who-just-don’t-know-what-they’re-talking-about.⁸⁹

⁸⁹ To be wholly accurate, the author notes that that one HOMES interviewee did good-humoredly characterize themselves as “(Warren’s) token left-wing liberal-vegan-Jew.”

“My god, my business depends on agriculture, you know?” Bev remarks. “Like I said, my father’s family farm has been there for -- I don’t know, 100 years. And I am *anything but* opposed to agriculture. In fact, it’s kind of funny. The place that I was telling you about, where we were going to build the house, I can see one dairy operation, and right down the road less than a half a mile is another dairy operation, you know, maybe it’s a quarter of a mile. I don’t know, it’s not very far, this other dairy operation. That would *never* have stopped me from building a home. *Never*. So I’m not opposed to that. But they make us all sound like we’re against agriculture because we are opposed to *this* siting. That’s not true. I am not even going to tell you that I am opposed to CAFOs,” Bev says bluntly, “although I have some real concerns with them. I am opposed to the siting in *this* location.”

I asked Bev about being lumped in with the nameless oft-cited NIMBYs. “That’s another thing. They try and make it sound like one of Sacia’s big quotes, “not in my backyard,” which Kathy⁹⁰ takes very personally, which she in particular has every right to. It’s in everybody’s backyard, you know?”

Ed doesn’t fit into the stereotype mold either. “Well, my wife has been a passionate environmentalist since she was a child. She’s not an overbearing tree-hugger, but she is concerned about all aspects of the environment.” He credits his wife with opening his eyes to issues like this. “Since I’ve known my wife, she has enlightened me to the atrocities that mankind is just bringing onto the Earth and I am deeply concerned about it. I am deeply concerned about pollution for the future generations of Americans

⁹⁰ Kathy lives less than 2500 feet from the proposed location of the dairy.

or the world, for that matter. We care about the future. I don't have to. I can afford to drive an Escalade. This is our choice not to."

Ed is also not so easily put into the political mold that the dairy supporters have designated for him. "I'm an independent; have been for years. I have voted Democrat; I have voted Republican. But we're environmentalists and we show it in our daily lives." I ask him if he and his wife are more liberal, more conservative, sort of in the middle of the road. "We're in the middle, leaning more conservative by far," he answers. "We're far from being liberal." In my conversation with Ed he tells me that he passes away and meets his creator that, "be it through my professional life or my personal life. I want to be judged on what I feel I've accomplished for him. I do not want to go to my maker having done nothing, not having tried."

Ed and Bev are just two faces in the highly diverse group of people who make up HOMES. The people I have met with and spoken to are all over the map on all sorts of things. I urge you to look carefully. This is not a homogenously-constructed group of people who share a political or social agenda. This group is made up of people farm who their land for a living; schoolteachers, artists, delivery truck drivers, retirees, parents, grandparents, lifelong Republicans, left-leaning liberals; carnivores; vegans; hunters; fishermen; livestock farmers; writers; Catholics; Protestants; Jews; people who have lived their entire lives in Jo Daviess County; people who have just gotten there; people who are well-off; people who struggle financially; organic farmers; and conventional farmers. They go snowmobiling and off-road in their ATVs; they plant gardens; they go to garage sales; they have a barbeque in their backyards when their son graduates from the local

high school; they attend MIT and the University of Chicago; they love antiques; they own businesses; they take their pets to the vet for shots. These are people you know: they are “The Everyones.”

Furthermore, these people – not one of them – are anti-agriculture. It is true that they differ in their opinions about *approaches* to farming; some are just fine with conventional methods, others are 100% committed to organic farming and products. Some raise livestock, and others avoid meat on ethical grounds. Some like the idea of bio-fuel, and others are deeply concerned about the shift of productive agricultural land to corn. Like all of us they rely on the food that farms produce. And like the rest of us, they are dependant on the water, land, and air and land that this CAFO will impact.

Something Ed said to me at the end of a conversation really hit the nail on the head. “You know all these people who want this thing, they keep saying that were *anti-agriculture*, that we don’t support farming. They tell people that we’re opposed to this dairy because we’re opposed to farming, which is simply not true. I mean, a bunch of these people *are farmers*, for crying out loud.”

In one sentence Ed is able to sum up the gaping “agricultural anti-law” holes in our nation’s current environmental regulation: “This isn’t about *farming*: this is about *pollution*. A.J. Bos is nothing but a polluter, plain and simple.”

You can only milk a cow so long. Then you're left holding the pail.⁹¹

Conclusion

While speaking with people in conjunction with this thesis, one person asked me to make sure I tell people, “that you can’t violate and infringe on people’s lives this way. That people have the right to their homes, and to their livelihoods, and this facility is an infringement on people’s right to -- in Illinois, by the way, we are the only state in the Union that has a constitutional provision that guarantees people a right to a healthy environment, and this infringes on people’s state constitutional right.”

Who gets left holding the pail?

A community may coalesce, organize, and work adamantly at the local level to oppose the facility, but in Illinois there’s no legal, binding arsenal at their disposal that can keep this facility out. The permitting decisions are all based upon regulations at the state and federal level that were created at one point in time to preserve the family farm. Critics argue that these “right-to-farm” rules are now being invoked by larger-scale operators as a means of protecting themselves. CAFOs are seen as using these antiquated regulations to veil themselves in a sort of “typical farming” cloak. These and use these obsolete right-to-farm laws permeate all states in this country, and generally allow CAFO

⁹¹ Hank Aaron

operators to prevail. This is the kind of frustration that I have heard people voice. “The real point is that the rules favor these facilities,” one person says, “and the rules don’t favor the local community members. They have no power to do something about it.”

The Jo Daviess County Board of Supervisors, in an 11-5 decision, voted not to support this facility, but their vote is categorized, legally, as a non-binding recommendation to the Illinois department of Agriculture. Essentially, there’s nothing they can do about it. Likewise, there’s nothing that the local zoning commission can do. There’s nothing that the mayor of Nora could do, even if he wanted to.

Warren Goetsch is the Bureau Chief of Environmental Programs at the Illinois Department of Agriculture. He’s been with the Department for 19 years. I asked him about the ILFMA. “Back in the early 90’s we started to see livestock facilities being built in Illinois that were getting fairly large. There was concern that there needed to be more oversight, some sort of a proactive activity such that maybe by doing a few things up front, maybe avoid having problems that we were seeing after the fact.

The General Assembly looked at it (CAFOs) and was concerned that sometimes counties find it difficult to deal with these kinds of issues when you have such a diverse population. Perhaps out in the West (United States) you may have more agriculturally dedicated counties, and there’s not so many competing interests. Whereas, in Illinois we do have a lot of urbanization going on and sometimes agricultural interests who in the past were able to dominate, are not today. Certainly in many counties they’re not.”

“It became a concern that maybe it would be easier for the state to make a decision (on CAFOs) based on science alone.” From this concern the ILFMA was born. It

vested in the IDOA certain responsibilities regarding the siting of new facilities. Not included in the ILFMA is any requirement that IDOA contact IEPA to look at construction plans. Nor is there a role for the IEPA to offer the Department any guidance. “No. We’re pretty much separate. We do the design standards work, site investigations, and all that kind of stuff.” Mr. Goetsch says. “The only thing that the IEPA does under the program is the waste release issue, if there’s a release. Really, IEPA doesn’t get involved unless there is some kind of an operational complaint regarding an existing facility.”

People in support of the Tradition Family Dairy and of Illinois CAFOs in general put a lot of stock in the regulatory processes in place. They are comfortable with the minimum level of design standards established by Illinois Pollution Control Board⁹² and feel the ILFMA provides ample proactive measures which ensure that there there’s something done ahead of time to control releases of manure. They also appreciate the state-wide uniformity which the ILFMA requires of its applicants. In states where siting decisions are made county by county, and each county has its own requirements in addition to State and Federal regulations, the time and resources it takes to navigate the application process can be overwhelming.

Mr. Goetsch is well-aware that the Jo Daviess County Board voted down this project, 11-5. “One of the challenges that we tend to have, and I think this happened up in Jo Daviess County, is the fact that sometimes...well, the information that gets provided at the public informational meeting may be conceptually accurate but it really

⁹² The Board is a quasi-judicial agency within the State of Illinois.

doesn't have the detail in many cases that a County Board would need to have to really make an intelligent decision."

He reminds me that the Board's decision, according to the ILFMA, is non-binding. "We certainly can benefit from information that comes from a county. There's certainly no way in Springfield that we're going to know about a subdivision that's been plotted but there's no actual work or excavation or homes being built yet. By having the county board weigh in with a non-binding recommendation, those kinds of issues can be brought to our attention and certainly be considered in the siting process." Mr. Goetsch continues, "But the final decision rests with the *State*, with the IDOA. At this point, our bureau within the Department is the one that administers the act, develops the information, and makes the decision."

The political "pitting of the neighbors against one another" is a recurring theme with everyone that I spoke to, begging the question of what it is that initially starts the argument? Why is this so divisive an issue? In speaking with the residents of Nora and Warren, the proposal for the dairy is conflict-ridden because people feel as though they're being invaded. They have a strong sense of violation. As expected when you have a sense of violation into your community or your home it then that fuels a sense of frustration and dissent. In this case, because they see the laws and regulations of the state as being clearly heavily pro-agriculture, the area residents feel particularly powerless and without recourse. They feel unprotected and betrayed by their elected officials, from the local mayor through the Governors office, and finally into the Congress.

One person put it like this: “Imagine that someone was to, let’s say, pull up in a large honey wagon⁹³, in your driveway. And they pulled up in your driveway, and they just decided, ‘Well, we’re going to store it here.’ And you say, ‘Well, what do you mean? You can’t store that there -- that’s my driveway!’ And the honey wagon operator says, ‘But, you know, I have all the right to do this by state and federal law. There’s nothing you can do about it.’ Well, I would imagine most people would be very upset about that, because it’s invading your space, your home -- the central part of your universe, which is your family and your home.”

This scenario is what communities perceive is happening when these facilities enter rural communities. It’s not that they’re literally constructing CAFOs on people’s driveways, but when a facility of this size is built, with the clear probability that odor and related emissions are going to seep into people’s homes and onto their property, as well as the problems with ground wire contamination, people feel that same sense of violation without adequate resource. It is only natural that when this happens people will go “on the offensive.” They see it as an invasion of their personal space, their private property, and their local public areas. This is a central part of why communities are so adamantly opposing the siting of CAFOs throughout rural areas in the United States.

Residents of Warren and Nora know they’re not alone in a national fight against CAFOs, that HOMES is not the only one of its kind in what its doing. “There are so many, I mean everybody is screaming for a moratorium on these and our government are doing nothing,” one interviewee told me. “It’s all the money. They keep trying to feed all of this into the public that the Ag business is the main economic driving factor of the

⁹³ In this context, a “honey wagon” is another name for a large vat of liquid manure.

United States and I say baloney. It is not. In my calculation, the main economic driving factor in the United States is the consumer. You have to look at the consumer as an entity when you're looking at the money of a country or a nation of a city or whatever. The consumer is the number one driving engine, economic driving engine of any engine, followed by the government. Now these are my thoughts, alright. But people like Sacia say 'you know Ag is the driving factor' and it's not. It's the consumer, followed by the government."

Opponents of the Nora dairy know that in terms of CAFOs, they've been quietly disenfranchised by the State and Federal governments in favor of kowtowing to the agricultural lobby. The ILFMA and this surreptitious method of silencing the people's voice against CAFOs in Illinois has been a brutal wake-up call for the people in HOMES. "The shame of the whole thing is we have local politicians that should be doing nothing more than counting pennies in a piggy bank. They're not equipped to run a little city, yet alone a small school system and that's the tragedy." These residents know now that communities like theirs are potential CAFO targets all over the country. "That's not saying that we don't have a lot of intelligence out here," I'm told. "It's just we don't have the kind of mass it takes to shut something like this down, nor do we have the connections in a political stream."

Warren Goetsch stresses that the ILFMA was enactment of legislation, placing legal requirements upon his office. He doesn't weigh in with an opinion, pro or con, about the dairy. "We're just doing what the statute says. If we approve a facility it's because the facility's application meets the requirements of the act. No more, and no less. If the facility is not approved it's because it does not meet the requirements of the statute.

It's not a beauty contest. It's not an 'I'm for it' or 'I'm against it'. It's whether or not the application meets the requirements of the statute."

I also ask Mr. Goetsch about the act's impact on the karst question. "At this point what we've tried to do is make sure that the information that we have is the best that we can obtain. What we've tried to do is gather the information on a regional basis, we've looked at stuff from the ISGS, we've looked at information from a whole host of experts, but we've also required the applicant to develop information specific to that site." It is this information, explains Mr. Goetsch, on which the application for this dairy will be approved or denied.

It seems that for Mr. Goetsch the politics of CAFOs were resolved by the enactment of the ILFMA; that he's just a guy doing his job. Others point out that the ILFMA was, literally, written by representatives of the agriculture industry, and tailored specifically to their wishes, leaving little room for the citizenry or the environment. Opponents of the dairy view the IDOA as being in bed with "Big AG" and put little stock in the Department's desire or ability to meaningfully enforce the laws in place. Long-standing track records of non-enforcement of regulations, frequency of manure spills, and lack of issuance of permits under the CWA don't instill much faith in the IEPA, either. People seem, albeit grudgingly, more understanding of the position that the IEPA and the US EPA are in. They know the agencies are underfunded and overworked. They also know that the current political climate makes agency action on highly controversial issues a tremendous risk to one's career. Even so, they are astounded by the construction of the environmental statues at both the Federal and State levels and the deliberate exclusion of

agriculture from any meaningful regulation. It's a good question, given the current language of environmental regulation. Even if they wanted to, how would the IDOA or IEPA (or any one of a number of Federal agencies charged with protection of the environment) actually have any meaningful intervention in a situation like this?

Their fears are most assuredly not assuaged by Jim Sacia's rhapsodic assurance that if the dairy is built, nothing bad is going to happen. "Do you really believe," wrote Representative Sacia in his February 14, 2008 weekly column, "that the Illinois Environmental Protection Agency and the Department of Agriculture would intentionally mislead us?"

Almost any way you look at it, the legal protections afforded to communities all over Illinois and all over America are insufficient to help fight the "business as usual" environmental damage that results from agriculture. J.B. Ruhl calls this the "anti-law of farms and the environment," which for all intents and purposes has left to the agriculture industry to determine on their own what the balance will be between food and pollution. But as J.B. Ruhl explains, "It is no longer credible to suggest they (agriculture) have used that discretion wisely or appear poised to do so without intervention."⁹⁴ Given the power and resources of the agricultural industry in America, it is unlikely that farmers will willingly leave their legislative safe harbor and consider alternatives about farming which are potentially less environmentally straining.

Despite the enormousness of Big Ag in America and the political realities of statutory loopholes for farms, members of HOMES maintain a cautious optimism. They

⁹⁴ Ruhl, J.B. 2000. Farms, their environmental harms, and environmental law. *Ecol. Law Quart.* 27(2):263-270.

believe that by working together, preventing the dairy from being constructed in Nora is an attainable goal. In this particular case, that might be true. Nora finds itself at the agricultural equivalent of the “perfect storm.” They are the perfect target for this type of installation; low-income, politically unconnected, rural. Add to this the weight of an investor like Mr. Bos or anyone remotely like him, and CAFO-friendly legislators. Top it off with a near-total failure to regulate the environmental effects of agricultural degradation, except perhaps for the occasional after-the-fact intervention.

What makes Nora different is their geology. Most people watching the situation play out in Jo Daviess County are betting that if the project is derailed, it will be the karst which tips the balance. *The karst*; rocks and stones. If they win their fight, opponents of this dairy will be saved by the state’s legal obligation to protect a unique *geologic* formation, *not* its citizens. It seems a perverse thing that Nora and Warren may succeed in preventing this dairy because of soil formations left eons ago by a glacier, but that their voice as residents and human beings has no place in the current regulatory framework if the state or the nation.

Finally, it is important to note that Nora might be able to “win it on a technicality,” but the next “Everytown” will probably not be so fortunate. If Mr. Bos cannot build his dairy in Nora, he’ll build it somewhere else. The unique geology Jo Daviess County will eventually make this CAFO, or others just like it, some other community’s problem. And that is a much bigger question.

In a number of instances CAFOs have been successfully fought off by community organizing efforts both in Illinois and other states. Factors that lead to a successful rebuff

are variable. It can be a potential lawsuit, based upon public nuisance. There are other instances where the sheer public outcry has swayed the opinion of potential builders. There are other cases where regulations have been successfully invoked, and the potential for environmental contamination has sometimes, although infrequently, sparked regulatory agencies to decline to permit a facility. It would be a struggle to identify any particular primary way in which people keep these things out of their community -- it's kind of a mixed bag. But it can be done and has been done. As the years go on it will be critical to see if the organizing efforts to keep these sort of things from being built become more successful or if results will stay more or less the same. Will they gain speed or will they get weaker?

I asked Dr. Thu what he thought about this. "That's a good question. Have they become more successful? You know, I really don't know. What I *can* say is that 15 years ago, 20 years ago, these facilities could come into communities, and the communities really didn't know where to turn for information or for assistance. Today, there are lots of organizations that can provide help. There are other communities that are experiencing these challenges that new communities can turn to for help, and so there's more communication, more collaboration, and there's more information flowing about the consequences, both in the scientific community, and in the activist community. Whether or not it translates into more success in resisting -- you know, I really don't know. I wish I did."