## Viewpoint

## Hog Heaven, Planner's Hell

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On September 23, 1996, the Duplin County, North Carolina Board of Health met in a special session called to review a proposal to regulate livestock farms under authority granted by North Carolina public health statutes regulating nuisance. Normally, Health Board meetings in Duplin County draw one or two observers at most, but this issue brought over 500 people to the hearing. Unprepared for the public interest, and perhaps overwhelmed by the hours of testimony, the Board adjourned without a decision.<sup>1</sup>

The above scenario is not unique to Duplin county. In fact, the issue of livestock farm regulation, especially corporate hog farms, is the source of similar conflict throughout North Carolina. It is not difficult to see why.

In 1986, North Carolina was seventh in the nation in pork production. Ten years later the state is second, with \$1.1 billion in annual sales (Stitch and Warrick 1995b). Clearly an important part of the state economy, hog farming has become a significant political issue as well. In 1992, members of the hog lobby contributed about \$40,000 to candidates. In only two years, the figure more than doubled to over \$92,000 (Satchell 1996:59).

The debate over hog farm regulation hinges on who should bear the costs of externalities associated with such a high level of pork production. Though North Carolina is not the only state facing the impacts of hog farming, natural and legislative circumstances within the state amplify the accompanying risks.

Duplin County is particularly affected by this issue since it is the leading pork producing county in

The authors are all candidates for Master's degrees in Regional Planning at UNC-Chapel Hill. An earlier version of this paper was written for a course on planning theory in the Fall of 1996. the state. In 1995, there were 1.8 million hogs in the county (NC Department of Agriculture 1996b). One year later, the numbers are still growing, with hogs currently outnumbering people 25 to 1 (Satchell 1996:57). The economic benefits to the county are considerable. Duplin County is home to Murphy Farms, the world's largest pork producer, and Smithfield Foods, the world's largest hog processing plant. In 1995, hog farming led to \$18.5 million in new construction and \$141 million in gross sales (Satchell 1996:57). Finally, the fact that 500 people attended the September Health Board meeting highlights the impact that hog farms have on people's lives in Duplin County.

#### Why Regulate Hog Farms?

A concern with public health and safety led to the implementation of the first housing and land use regulations by local jurisdictions. This concern, along with the ethical imperative of preventing harm to individuals (Feinberg 1984), underpins present day nuisance and zoning laws—the main tools planners use to regulate land use (Beatley 1994).<sup>2</sup> Access to a safe and healthful environment as a welfare interest and human right further justifies land use regulation.

While hog farming may have positive economic benefits, it produces significant deleterious health and environmental impacts as well. Numerous studies have documented the health risks of hog waste lagoons to humans, ranging from headaches, nausea, and shortness of breath to immune system problems, spontaneous abortions, and death.<sup>3</sup>

Prevention of environmental degradation, minimizing externalities, and internalizing pollutionproducers' costs are further justifications for land use regulation (Ortolano 1984). Land use regulations that control externalities and require compensation to those affected by externalities rest on an economic rationale, and are important in clearly delineating the property rights and responsibilities of businesses, individuals, and the public. Increasingly, regulation preventing environmental degradation is also being defended on moral grounds (Beatley 1994).

Pollution caused by hog waste creates significant monetary costs (clean-up and lost productivity) as well as high levels of environmental damage. Enormous waste lagoons, often unlined and near rivers, threaten water quality. The flies and odor generated by waste lagoons decrease the quality of life of nearby residents. The sandy soil of the coastal plain makes the land vulnerable to sewage spills. Unlined lagoons do little to filter out contaminants before they reach the groundwater. Heavy rains that damage or destroy the waste lagoons cause the spillage of tons of waste directly into rivers flowing through the state. The results are noncontainable and multijurisdictional.

# Limitations on Regulating Hog Farms in North Carolina

The use of zoning to regulate Duplin County hog farms are thus justified on ethical, economic, and legal grounds. Why, then, do citizens' pleas for help in Duplin and similar counties not result in political change?

Perhaps the single biggest reason stems from Duplin County resident and Murphy Farms founder and CEO, Wendell Murphy. For 10 years, Murphy served in the State Legislature, and for a time was Vice-Chair of the Senate Agriculture Committee (Stitch and Warrick 1995e) From this powerful post he helped pass a series of bills, known as Murphy's Laws, which protect hog farmers from state regulation. These laws prohibit penalties for discharging hog waste into streams, exempt hog farm buildings from state taxes for buildings and equipment, and most importantly, exempt hog farms from all zoning authority. Wendell Murphy continues



### Legislative Update

House Bill 515, introduced by Rep. Morgan, was passed by the North Carolina House of Representatives on April 29. A companion bill is currently sitting in the Senate Agriculture, Environment, and Natural Resources Committee. Key provisions of the bill include:

- increasing the setback restrictions for siting swine houses and swine lagoons;
- requiring that any person who intends to construct a swine farm whose animal waste managment system is subject to permit requirements to provide written notice to nearby property owners, the county, and the local health department;
- granting counties the power to regulate intensive animal feeding operations in terms of density, height, size of structures, location, and use for operations of greater than 6,000 hogs;
- prohibiting the location of swine houses and lagoons in the 100-year floodplain;
- establishing a one-year moratorium on the construction of new or expanding swine farms or lagoons.

Although passage of the bill would give local planners more power to regulate large hog farms, it would not help them regulate smaller hog farms. In addition, many of the counties with intensive hog farming probably would not take advantage of their increased regulatory power because they do not have county zoning. For more information on the pending legislation, contact the Southern Environmental Law Center at (919) 967-1450. -Jennifer Hurley

## Robeson County Public Health Nuisance Rule

The rule approved by the Robeson County Board of Health establishes a process by which the County Health Director may determine whether an intensive livestock operation constitutes a public health nuisance. The rule defines an intensive livestock operation as a facility with more than 100 animal units. Animal units are used to facilitate comparison of small and large livestock. One hog, for example, equals 0.4 animal units and one steer equals 1 animal unit.

Under the rule all new intensive livestock operations require a permit issued by the County Health Director. The application process begins when the owner of the proposed operation provides the Health Director with the following information: name, address and phone numer of the owner and manager, the location of the proposed operation with maps decribing land uses within a one-half mile radius of the site, a brief description of the operation, and a description of the waste management plan. The permit is declined if the proposed operation is within one-half mile of a church, school, hospital, rest home, nursing home or occupied residence. As part of the process, the Health Director notifies all property owners within the one-half mile buffer zone allowing them the opportunity to contribute to the investigation. During the investigation the Health Director reports all findings to the County Board of Health.

The Health Director may begin an investigation of an existing intensive livestock operation in response to complaints, requests by officials, major changes in the scope of operations, or if the Health Director suspects a public health nuisance. In addition to the information required during the investigation of proposed operations, the Health Director may request a description of the owner's responses to the complaints and copies of any other inspection reports.

The Health Director determines if the operation is a public nuisance and, if so, whether it was caused by conditions beyond the control of the owner. The Robeson County rule provides for a public hearing and Board of Health evaluation of the preliminary decision. Following the final determination of the facility as a public health nuisance, the Health Director issues an order of abatement directing the owner to correct the nuisance. to make large campaign contributions to secure favorable treatment for the hog industry (Stitch and Warrick 1995a).

Because of Murphy's Laws, North Carolina planners have found themselves removed not only from the issue, but from their staple regulatory power—zoning. Essentially, Murphy's Laws "shut the door on any efforts by individual counties to place zoning restrictions on hog farms" (Stitch and Warrick 1995c).

## **Options for Regulating Hog Farms**

The inability to implement zoning regulations has created a unique and constrained role for planners. Taken at face value, it might seem that there is little opportunity for planners to minimize hog farming's negative impacts on the quality of life in their counties. What then, *are* the options open to planners?

Planners should search out alternative means of using regulation or public pressure to curb hog farm pollution. It is not enough to simply seek new stopgap measures to the growth of the hog industry. Factory farms that pollute the air and water, and that create employment opportunities that many have compared to sharecropping, are clearly not in the public interest of North Carolina. By remaining neutral, objective technocrats, planners side with those who care more about profit margins than the environmental and economic damage they are doing to the state.

#### Health Regulations

Duplin County officials are looking to health ordinances for regulatory power in the hopes of circumventing state protection granted to hog farms. The proposed ordinance currently before the Duplin County Health Board would require impact statements and county approval of all new large farms, and could require improvements to existing properties through a formal complaint process. Similarly, Robeson County successfully used Health Department regulations to regulate hog farms (Robeson Health Department 1996). While limited in scope and power, the health regulations do manage to keep the problem from getting much worse.

However, the experiences of other counties demonstrate that this approach has inherent risks. In Balden County, for example, one large hog



farming interest threatened to file a lawsuit against each individual member of the Board when the Health Board contemplated regulating hog farms under nuisance laws. As one Duplin County Commissioner stated, "... They were not only sending a message to Balden County, they were sending a message to all the other counties."

#### Advocacy Planning

Duplin County officials are worried that hog farming interests will exert enough political influence to weaken proposed health regulations substantially. One Duplin County Commissioner feels that "Basically the hog industry has everybody bought off—[anyone] that would attempt to do any planning." Though the hog farming issue is of great importance to people in the county, as of yet, there is little citizen organization to fight these interests. The lack of organization among this potential constituency presents an opportunity for the planner to act as an advocate.

As advocates, planners provide "professional support for competing claims about how the community should develop" (Davidoff 1965:309). For example, the planner could offer to translate citizen concerns into a technical language that county officials would find persuasive. S/he might also facilitate the organization of new citizen groups by informing citizen leaders, or conducting citizen forums. The planner could combine a role as technical advisor with an advocate role by documenting the impacts of hog farming and presenting them to citizen groups.

Advocacy planning sometimes raises questions of legitimacy that conflict with a widely accepted notion of the planner as an "objective" functionary who steers clear of politics. However, planners can find support for an advocacy role in the AICP/APA report "Ethical Principles in Planning." Part of the report states that planners should serve as advocates only when "objectives are legal and consistent with the public interest." Thus, the strength of this justification rests on the level of existing or attainable consensus among the citizenry.

In addition, organizing the public to support the proposed health ordinances is consistent with the

objectives of the planner's employer, the County Commission, as well as members of the Health Board. Such an obligation to the "employer's interest" is also embodied in the AICP Code of Ethics. Finally, a potential advocate role could be further justified as an attempt to protect the integrity of the natural environment.

#### Political Action

Because planners are viewed as objective experts, the positions they support gain validity. Planners' collective silence on this issue may be interpreted as support for the status quo. Passive validation is a choice that is as politically charged as is a choice of action. Therefore, planners should speak out about their knowledge of the impacts of factory hog farming and use that knowledge to participate in the political process on a statewide level. Public pressure may accomplish what health regulations cannot.

Some ideas for working the democratic process on the state level include:

1. Write state legislators, and encourage others to do the same.

Be as specific and concrete as possible. For example, explain the environmental and social effects of hog farming on your area of the state. Invite legislators to a meeting held at the home of a local resident who is affected by a nearby hog farm. Send them statistics about the nitrate levels in area wells, the number of children affected by asthma caused by hog fumes, and other effects. Send a graphic description of the number of flies in the areas around hog farms.

2. Do not be afraid to use the media.

The Raleigh News & Observer periodically runs follow-up stories to their Pulitzer Prize-winning series on hog farms in North Carolina. They periodically run follow-up stories. If you know of a bad situation in your area that the community is powerless to regulate, send the News & Observer a letter. Include statistics, photos, or a videotape. You will not have to be quoted as a source.

## Endnotes

- <sup>1</sup> Since this paper was first written in the fall of 1996, the Duplin County Board of Health has not taken significant action on the matter of hog farm regulation. In April of 1997, a few local citizens appeared before the Board of Health to inquire why neither the County Commission nor the Board of Health had taken action on their earlier complaints. In response, the Health Board named a committee to study the issue. The committee includes members of the Board of Health, Health Department staff, and the Director of the Environmental Section of the County Health Department. No citizens were appointed, and no deadline for reporting back to the full Board was established. A member of the committee suggested that the issue had quieted down in Duplin County, and nothing was likely to come out of the committee until after the General Assembly takes action on the issue.
- <sup>2</sup> Interestingly, *Ex parte Schrader*, San Francisco (1867) upheld the prohibition of slaughterhouses, hog storage, and the curing of hides in San Francisco.
- <sup>3</sup> See Mulvaney 1996:15(5); U.S. Department of Health and Human Services 1996: 569(4); "Fatalities Attributed to Entering Manure Waste Pits -Minnesota, 1992" 1993: 3098(2).

#### References

- Beatley, T. 1994. *Ethical Land Use*. Baltimore: The Johns Hopkins University Press.
- Davidoff, P. 1965. "Advocacy and Pluralism in Planning," In S. Campbell & S. F. Fainstein (Eds.), *Readings in Planning Theory*. Cambridge: Blackwell Publishers. pp. 305-322
- Duplin County Board of Health. 1996a. October 3. Minutes. \_\_\_\_\_. 1996b. September 23. Minutes.
- Eisner, S., Gallion, A., & Eisner, S. 1993. The Urban Pattern, 6 ed. New York: Van Nostrand Reinhold. "Fatalities Attributed to Entering Manure Waste Pits -Minnesota, 1992." 1993. June 23. JAMA, Journal of the American Medical Association, 269(24): 3098(2).
- Feinberg, J. 1984. *Harm to Others, Vol. 1.* Oxford: Oxford University Press.
- Groups Target North Carolina Hog Farm Pollution. 1996. May. *EDF Letter*, 27(1). [http://www.edf.org/pubs/EDF-Letter/1996/May/b-hogs.html] Accessed 9/26/96
- Mulvaney, Karen. 1996. "Watch out for Killer Algae: Years of Dumping Hog Waste into North Carolina Rivers Has Created a Monster." *E*, 7(2):15(5).

North Carolina Department of Agriculture. 1996a. July 18.

"Graham makes appointments to groups studying hog waste issue," News Release. [http://www.agr.state.nc.us/ paffairs/release/hog.html] Accessed 9/26/96.

- \_\_\_\_\_. 1996b. July 17. "Graham urges farm agencies, organizations to notify producers of deadline," News Release. [http://www.agr.state.nc.us/paffairs/release/ deadline.html] Accessed 9/26/96.
- Ortolano, L. 1984. Environmental Planning and Decision Making. New York: John Wiley & Sons.
- Robeson Health Department. September 1995, amended May 1996. "Robeson County Rules to Determine If Intensive Livestock Operation is Public Health Nuisance."
- Satchell, Michael. January 22, 1996. "Hog heaven-and hell," US News and World Report, p 55-59.
- Stitch, Pat and Jobt Warrick. 1995. "Boss Hog: North Carolina's Pork Revolution," *The News and Observer*. [http://www.nando.net/sproject/hogs/hoghome.html] Accessed 9/28/96.

1995a. Feb. 26. Boss Hog 5: "Who's in charge?"

- 1995b. Feb. 25. Boss Hog 4: "The smell of money."
- 1995c. Feb. 22. Boss Hog 3: "For Murphy, good government means good business."
- 1995d. Feb. 21. Boss Hog 2: "Corporate takeovers."
- 1995e. Feb. 19. Boss Hog 1: "New studies show that lagoons are leaking."
- Understanding the Impacts of Large-Scale Swine Production: Proceedings from an Interdisciplinary Scientific Workshop. 1995. June 29-30. Des, Moines, Iowa.
- U.S. Department of Health and Human Services. 1996. July 5. "Spontaneous Abortions Possibly Related to Ingestion of Nitrate-Contaminated Well Water -LaGrange County, Indiana 1991-94." Morbidity and Mortality Weekly Report, 45(26):569(4).

#### **Editor's Note**

The authors conducted interviews with several residents and officials of Duplin County in October, 1996. To protect their anonymity, these names have been removed from the text and references.

#### **Related Internet Resources**

#### www.nando.net/sproject/hogs/hoghome.html

This section of the Raleigh News and Observer's home page includes the Boss Hog Series with links to Boss Hog 2 and a database of follow-up stories on hog farming, including the full text of the Swine Odor Task Force report, "Options for Managing Odor."