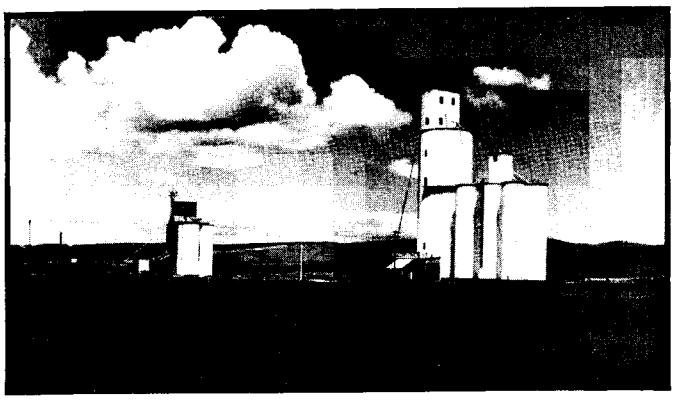
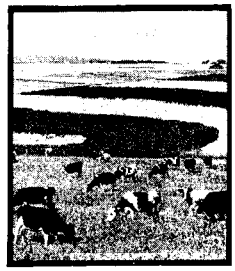
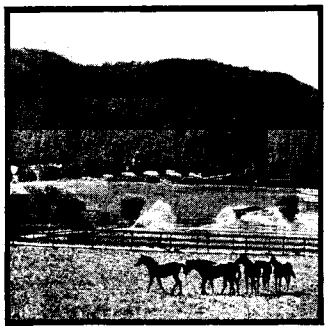
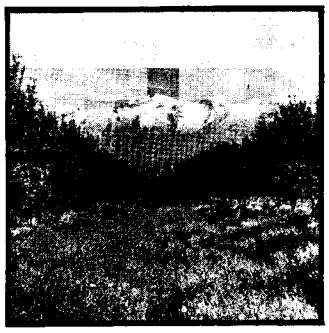
National Agricultural Lands Study

Zoning to Protect Farming
A Citizens' Guidebook









National Agricultural Lands Study

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Zoning to Protect Farming
A Citizens' Guidebook

By
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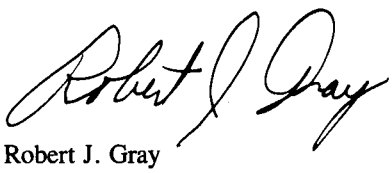
INTRODUCTION

This publication is for citizens interested in zoning to protect farming. It explains reasons people give for protecting farms and farmland, describes how farms are converted to non-agricultural uses, explains zoning tools available to protect farming and includes some references to community case studies of farmland protection programs. It shows how people can help develop their own program to protect farming. People are advised on how to make the community aware of the problem, how to plan to protect farming, how to turn a farming protection plan into law, and what to do after a farming protection program has been implemented.

I would like to extend my deep gratification to Professor William Toner and to Dr. George Campbell for their dedicated efforts in preparing this guidebook.

Most of the following material is discussed in more detail in *The Protection of Farmland: A Reference Guidebook for State and Local Governments*. Additional copies of this and all other National Agricultural Lands Study publications are obtainable by writing to the following address:

U.S. Department of Agriculture
Soil Conservation Service
Room 6117, South Building
Washington, D.C. 20250
Attention: Mr. Howard C. Tankersley
Chief, Land Use Staff
(202) 447-7443



January 1981

Robert J. Gray
Executive Director
National Agricultural Lands Study

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One: WHY PEOPLE PROTECT FARMING

For most people, the issue of protecting farming is less a national or state issue than a local one. It is in counties, cities, towns, and villages that people feel the loss of farms and farmland in the most direct and immediate ways. It is difficult to overstate how varied, how individual, and how widespread the effects of the changes are. When talking about the loss of farms and farmland to non-farm uses we are also talking about:

—property tax increases to pay for the increased cost of servicing scattered rural subdivisions;

—the destruction of fragile lands and the pollution of air and water as farmlands are replaced by suburban developments;

—a shift in the local economic base as agricultural jobs are replaced by manufacturing and service jobs;

—the decline of the political power of agriculture as suburban votes supplant agricultural votes; and,

—the loss of the rural landscape as farmhouses and fields are bulldozed for shopping centers, highways, and subdivisions.

These events and others like them are what makes the uses of farms and farmland a local issue. For the community, this is a problem of growth management—of influencing the rate, timing, location, type, or amount of new non-agricultural development. It is a matter of seeking and obtaining a balance between competing uses of land while shaping new development in the community interest. Realistically, most communities can set aside land for new residential, commercial, and industrial development without destroying their agricultural base.

To achieve this balance of interests in the use of land, it is important to understand how poorly-managed new development changes the agricultural base. It is worthwhile to examine the story of a fictional family farm converted to non-agricultural use.

Two: HOW FARMS ARE LOST: THE "McCAHILL CASE"

The Will McCahill family farms 610 acres of mostly prime farmland about fifty miles south of Chicago. They own 160 acres and cash-rent 450 acres. McCahill's 160 acres have been in the family since Will's grandfather bought the land 102 years ago. Will inherited the land and farmstead when his father died in 1958.

Will McCahill's machinery and equipment are worth about $250,000. He owes the local bank and other creditors about $190,000.

Will and his wife, Sally, have two daughters in high school and a son in his second year of college. They all work on the farm. Occasionally, Will hires farm workers.

Fifteen years ago the county, at the insistence of farmers, paved the old country road Will's home was on. A year later, twenty acres that Will rented were sold to a subdivider who promptly built seven homes and called the subdivision "Prairie Estates."

Soon, weeds appeared more often in adjoining fields Will farmed. Trash sometimes was tossed or blew onto the fields. Traffic on the paved road increased and Will was irritated about having to drive farm machinery closer and closer to the road's shoulder to get to his rented fields.

The people of Prairie Estates were also irritated. Sometimes, farm fertilizers caused bad smells on their estates, and noisy late-night farm operations were disturbing. Their water smelled and tasted terrible, so most people began importing drinking water. Within two years, local developers, farmers and Prairie Estates residents formed a water district. The district got funds from the Farmers Home Administration to install facilities for a central source of good, clean, water for district residents.

The old country road had been paved for seven years and ran by three more new subdivisions when Will McCahill received a letter from the tax assessor. Will's annual property taxes had increased from $3,000 to $6,000. The tax assessor said no mistake had been made. The value of the McCahill land had increased because of the nearby subdivisions and new suburbanites were demanding and getting more public facilities and services—snow removal, police and fire protection, school busing and the like.

By the tenth year, more subdivisions were built on land that Will had rented, forcing him to rent farmland farther from his farmstead. Traffic on the paved road continued to increase. Moving farm machinery down the road was no longer just irritating. It was dangerous. The trash and weed problems escalated and Will found plastic milk bottles jammed into the insides of farm machinery. For the first time, fences around the fields became necessary as Will found motorcycle and snowmobile paths cut through his crops, and stalks of corn picked clean.

Development continued. The houses eventually were joined by a small shopping center, an office building, several gas stations, mini-markets, and fast food stands.

Three neighboring farms had been sold and platted for subdivision. Conflicts between remaining farmers and suburbanites increased. Soon, the area suburbanites signed petitions and the County Board, now controlled by suburbanites, passed an ordinance prohibiting twenty-four hour farm machinery operations. Later, a farmer who ignored the order was cited and fined.

The next year, the owners of 160 acres of farmland Will was renting sold the land to subdividers and Will could not find another 160 acres to rent within twenty miles. Will decided he could no longer farm profitably. He sold his 155 acres of farmland and all his farm machinery and equipment. He kept only the five acres taken up by his home and farm buildings.

So fifteen years after the old country road serving the McCahill farm was paved, Will lost his farm and his occupation.

The community lost:

—a farm that contributed more property tax revenue to the county than it cost in public services;

—hundreds of acres of open space, a vital component of the rural landscape that once gave the county much of its character;

—one wetland and one wooded area on the farm that were converted to subdivisions; and,

—farm income and farm jobs in the local economy.

These losses were compounded as other farms were converted to suburban use. Yet the largest and most enduring cost would stem from a pattern of development that leapfrogged over the countryside. Houses were put on the best, most productive agricultural land, while other lands, less productive and nearer cities, were left vacant.

Although the McCahill Farm is fiction, the elements of the story are true. The story has been pieced together from hundreds of stories across the country—of farmers who were driven out, of farmland lost, of farmland wasted. These events have made protecting farms and farmland a major concern of many people.

Three: TOOLS USED BY COMMUNITIES TO PROTECT FARMING

A comprehensive plan and a zoning ordinance are the main tools used by counties, townships, cities, and villages to protect farming. Most often, local governments have used their comprehensive plan and zoning ordinance in combination to protect farming. The comprehensive plan is a document that describes the goals, policies and development plan for protecting farming. The zoning ordinance is the legal authority to implement the plan.

A comprehensive plan protects farming by designating where future urban growth and development should occur and by designating areas for farming.

For example, Miesville, Minnesota, adopted a comprehensive plan to manage new growth and to protect farming. The city has a population of about 200 and an area of about two square miles (1280 acres). Of this, about 1000 acres are farmed.

Miesville adopted five specific policies to achieve their goals:

1) Non-farm residential development in the agricultural areas should be limited to one home per forty acres on a lot of at least one-half acre. (This policy assumed that zoning would be used to carry it out.)

2) County and state tax assessors should be notified when the plan is implemented in order to depress rising tax assessments on farmland. (Here Miesville officials used a state program's tax incentives.)

3) No water or sanitary sewer services should be extended into agricultural areas by a public body. (In this policy, officials used their influence or control over capital expenditures to keep public services out of agricultural areas.)

4) Tax revenues should not be used to upgrade the level of public service to residents in the farming area during the next ten to fifteen years.

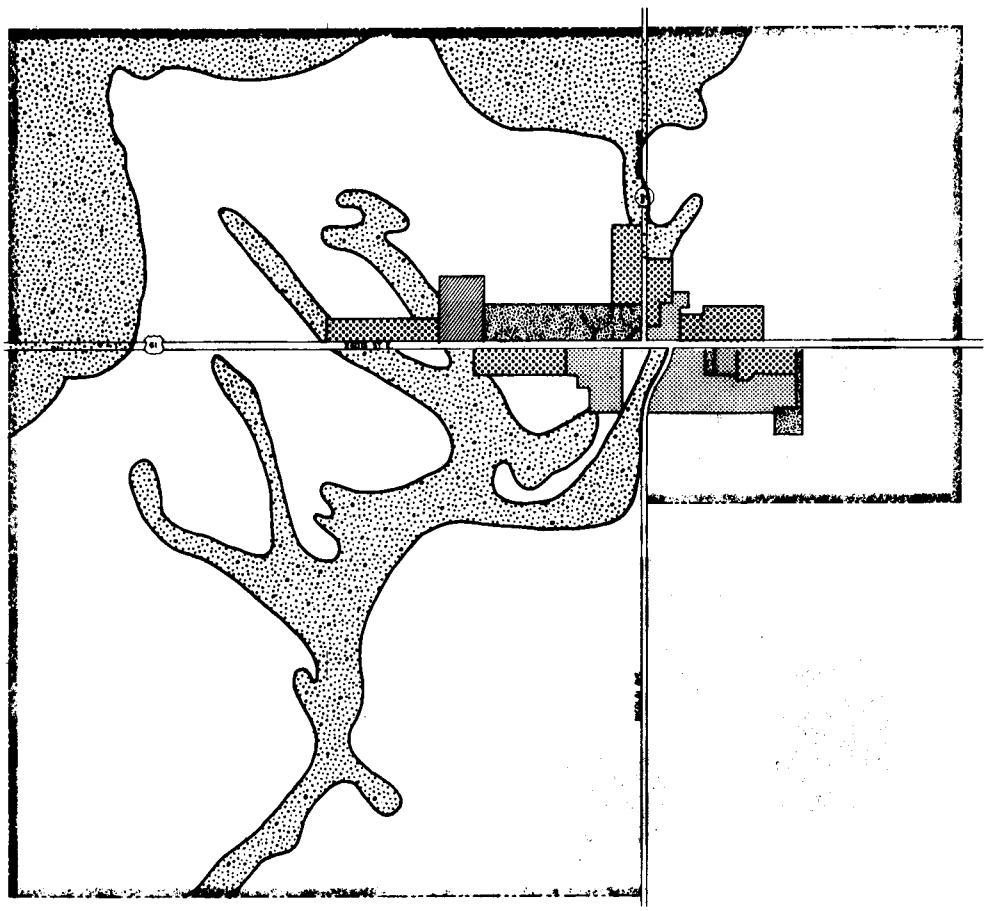
5) Commercial and industrial uses should be discouraged in farming areas. (This policy assumed that zoning would be used.)

Miesville's program includes a development plan and map. (See Figure 1) In the map, the shaded area includes land in existing non-agricultural uses and land for future housing, commercial, and industrial uses. The striped area is land set aside for long-term agricultural use. The land in the dotted area is set aside for conserving natural resources.

Goals, policies, and development plans are central elements of a comprehensive plan. Together they set out the way a community wants to develop. A comprehensive plan, by itself, does not usually have the legal authority to control the actual development in a community. A zoning ordinance is usually required to do this.

A zoning ordinance is the legal instrument used by local government to control the use of privately-owned land in the community. The ordinance is composed of a zoning map and a zoning text.

Figure 1.



KEY
AGRICULTURE (one unit per 40 acres)
URBAN RESIDENTIAL
COMMERCIAL / INDUSTRIAL
PUBLIC / INSTITUTIONAL
PUBLIC OPEN SPACE
CONSERVATION

PREPARED BY:
DAKOTA COUNTY PLANNING SERVICES
HASTINGS, MN. JUNE 1979

CITY OF
MIESVILLE
DAKOTA COUNTY, MINNESOTA

Scale in Feet
0 400 800 1200 1600 2000

DEVELOPMENT GUIDE PLAN

The zoning map typically delineates five major types of zoning districts: residential, commercial, industrial, conservation, and agricultural. In lightly populated rural areas, as few as three zones may be identified (residential, agricultural, and conservation).

The zoning map of Rice County, Minnesota, is a good example of a community that has many (10) zoning districts. Figure 2 is a zoning map for Rice County. The grey-shaded areas are incorporated areas and not within the zoning authority of the County. The A-1 zones surrounding the incorporated areas are currently in agricultural use but reserved for new urban growth. The A-1 zone is titled, "Agricultural Land Retainment for Urban Expansion." Most of the remaining land in the county is contained in the "A" or Agricultural District. In this district, special protections are given agricultural uses and heavy restrictions are placed on all non-agricultural uses.

Rice County's zoning map is broken into further detail for small, unincorporated towns. For example, the zoning map for Shieldsville (Figure 3) identifies four major zoning districts: the "RA" or Rural Residential District set aside for residential use; the "HC" or Highway Commercial District set aside for commercial uses; the "NES" or Natural Environment Shoreland District gives special environmental protection for Mud Lake; and the "A-1" district temporarily conserves lands for farming that are adjacent to towns. Eventually, these A-1 lands will be used to absorb new residential, commercial, or industrial growth.

A zoning text spells out the purposes, uses and standards for the various zones or districts identified on the zoning map. The text also states procedures to be followed in administering the zoning ordinance. The text for each district follows a common outline: a statement of the purpose for adopting the zone; a list of permitted uses (those allowed by right) in the zone; a list of special uses (those needing permission) in the zone and criteria for evaluating proposed special uses; and standards governing permitted or approved special uses.

The following typical examples taken from various zoning texts describe purposes of agricultural zones.

1) *Protecting farmland:* This purpose is sometimes extended to include forested lands or conservation areas. It is illustrated by the Boone County, Ill. ordinance, ". . . to maintain, preserve, and enhance agricultural lands . . ."

2) *Protecting farming operations:* Many ordinances set out to protect farming operations from interference by non-farmers. Marion County, Oregon, has an ordinance, ". . . to guarantee the preservation and maintenance of the areas so classified for farm use free from conflicting non-farm uses . . ."

3) *Reducing public service costs:* By preventing premature rural subdivision,

Figure 2.

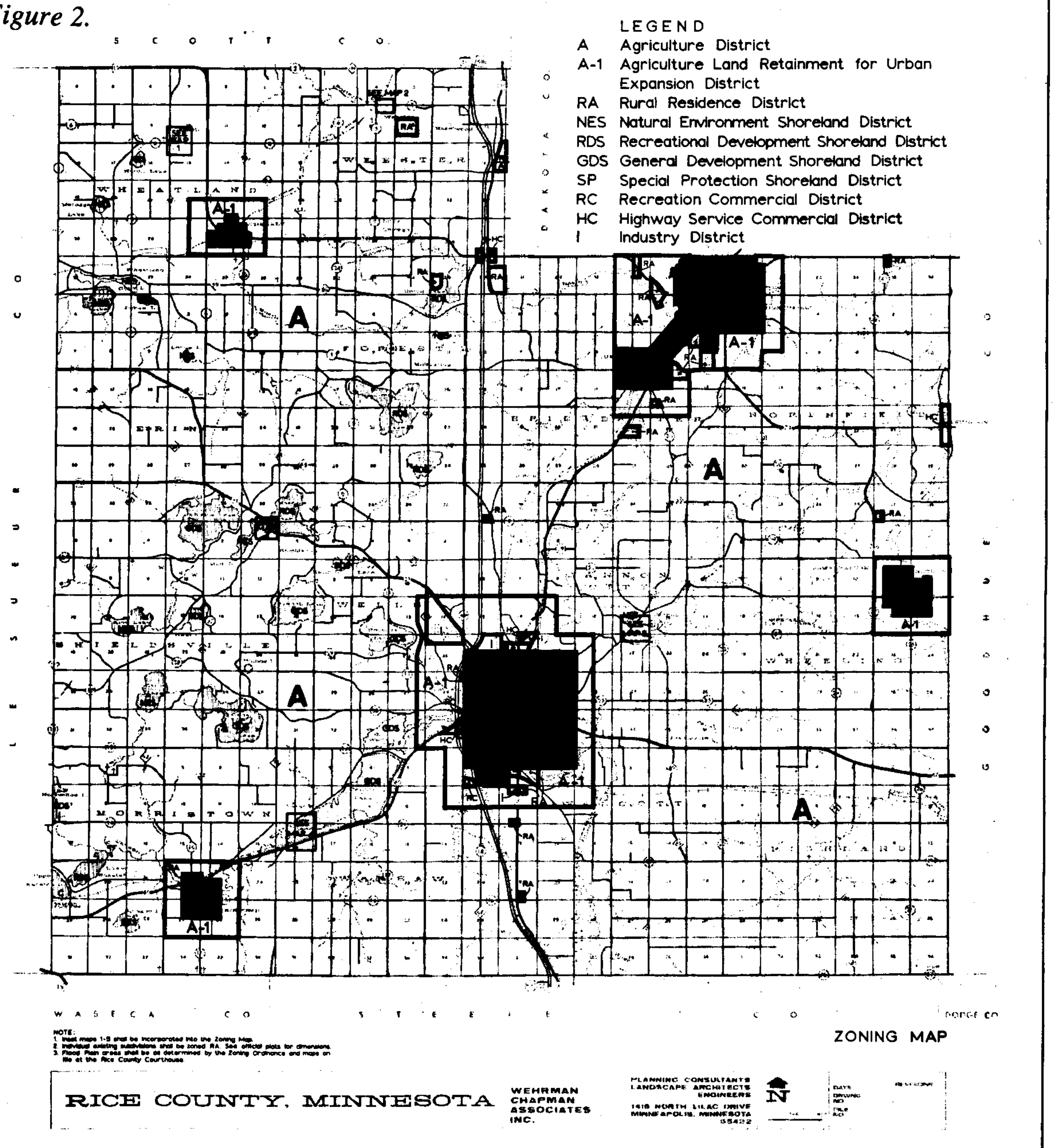
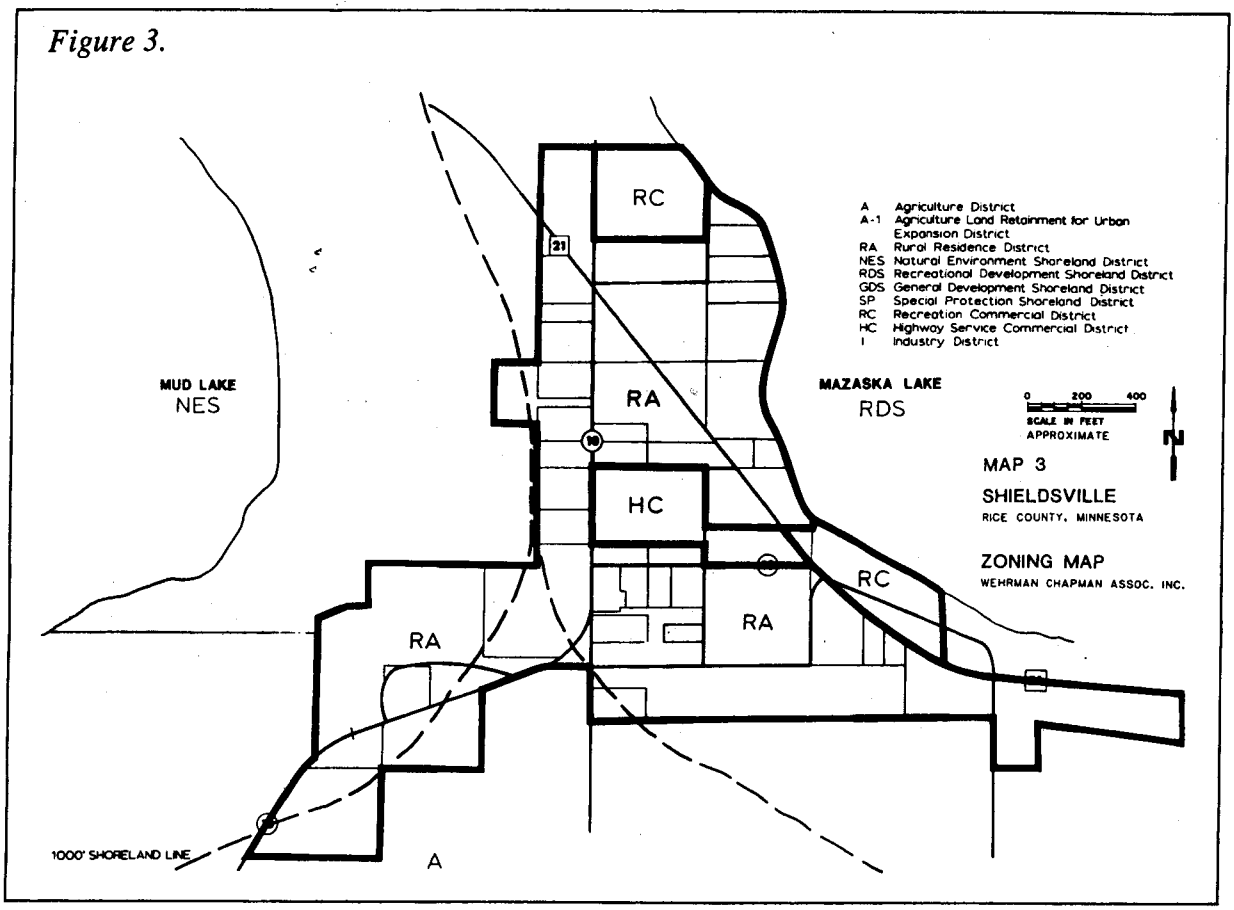

LEGEND
A Agriculture District
A-1 Agriculture Land Retainment for Urban Expansion District
RA Rural Residence District
NES Natural Environment Shoreland District
RDS Recreational Development Shoreland District
GDS General Development Shoreland District
SP Special Protection Shoreland District
RC Recreation Commercial District
HC Highway Service Commercial District
I Industry District
ZONING MAP
RICE COUNTY, MINNESOTA
WEHRMAN CHAPMAN ASSOCIATES INC.

Figure 3.


RC
RA
HC
RA
RA
RC
A
MUD LAKE
NES
MAZASKA LAKE
RDS
1000' SHORELAND LINE
21
10
A Agriculture District
A-1 Agriculture Land Retainment for Urban Expansion District
RA Rural Residence District
NES Natural Environment Shoreland District
RDS Recreational Development Shoreland District
GDS General Development Shoreland District
SP Special Protection Shoreland District
RC Recreation Commercial District
HC Highway Service Commercial District
I Industry District
0 200 400
SCALE IN FEET
APPROXIMATE
N
MAP 3
SHIELDSVILLE
RICE COUNTY, MINNESOTA
ZONING MAP
WEHRMAN CHAPMAN ASSOC. INC.

communities seek to keep the lid on the cost of public services. Manitowoc County, Wisconsin, has an ordinance "to preserve productive farms by preventing land use conflicts between incompatible uses and controlling public service costs."

4) *Protecting the agricultural economic base:* Because the communities have a heavy investment in agriculture, the communities protect this investment by protecting farming. In Whatcom County, Washington, a purpose of the ordinance is "to maintain a sufficiently large scale of agriculture to assure the economic feasibility of necessary supporting services to the agricultural sector."

5) *Saving fragile lands:* Many communities also see their agricultural zone as preserving environmental values. In Blue Earth County, Minnesota, one purpose of the ordinance is to "preserve woodlands and other areas of aesthetic and scenic value which, because of their physical features, are desirable as water retention areas, natural habitat for plant and animal life, green space or other uses . . ."

The list of permitted uses are those uses allowed by right in the zone. They require no special permission from the zoning authority. In an agricultural zone, permitted uses are mainly based on current agricultural practices and needs.

In the zoning text of Stow Crew Township, Cumberland County, New Jersey, for example, there are three major classes of permitted uses in their agricultural district. The zone permits farm and agricultural activities including those pertinent to nurseries, small animal and livestock raising. Selling farm or dairy products raised on and sold on the farm is permitted. Homes for farm residents and employees are permitted.

A special use (also called a conditional use) is a use that may or may not be permitted by the zoning authority. The zoning authority's decision typically is based on: whether the special use meets the purposes of the zone; whether it is compatible with surrounding uses; whether it adversely affects environmental areas; and how much, if any, it adds to public service costs.

There are two major types of special uses in the agricultural zones. Non-farm residences are often special uses since these homes may not be compatible with the district purposes, surrounding farms, environmental constraints, or budgetary limits of the community. Some agricultural uses, because of their size or by-products, are designated as being special uses. For example, a feedlot with 200 head of cattle would likely be a permitted use, but a feedlot with 10,000 head would likely be a special use. A feedlot of 10,000 head may have unacceptable adverse effects on surrounding farms as well as on nearby environmental resources.

A minimum lot size is one of four typical standards governing uses in zones. Landowners must own a certain amount of land in the zone before any of the permitted or special uses may be undertaken. For example, in

order to build a farmhouse in the agricultural district, a minimum of 35 acres might be required.

Bulk requirements is a standard specifying minimum floor areas for buildings and maximum lot coverage of the buildings. *Height limitations* for structures are set, and *minimum yard requirements* specify minimum lot width, depth, and building setbacks from roads and adjoining properties.

Other Tools Used By Local Governments

Although most communities use a comprehensive plan and a zoning ordinance to protect farming, some have used other tools either to supplement the plan and zoning or to protect farming without a plan and zoning.

A capital improvements plan is a tool often used to supplement the comprehensive plan and zoning ordinance. The plan specifies future provisions of key public facilities and services such as water, sewer, fire, police, and snow removal. These facilities and services could be denied or limited within the agricultural zones. Public services and facilities encourage new urban growth in designated growth areas and thus discourage new growth in the designated agricultural areas.

The Transfer of Development Rights and the Purchase of Development Rights sometimes supplement the comprehensive plan and zoning ordinance. These tools encourage farm land owners to sell their right to develop. Basically, this involves farm land owners selling an easement to their land prohibiting the owner from using the land for urban-type development. In return for the easement, the farm land owner is compensated with cash, assets or tax or other benefits for keeping the land in agricultural use. If these easements are sold to government, they are called the purchase of development rights. If the easements are sold to private buyers, they are called the transfer of development rights.

Citizens and officials should be aware that regional, state, or federal programs and laws can also reinforce, complement, or sustain local plans or regulations protecting farming.

Regional assistance is available to most communities through a regional planning agency or council of governments. In the main, these regional agencies or councils are advisory, but they can support local government in protecting farming. The regional agency often can provide technical assistance to communities — especially small, rural communities—in preparing a comprehensive plan or a zoning ordinance to protect farming. The regional agency can also review federal funding applications for such projects as sewer plants or water lines. The regional agency could recommend that the funding application be denied in order to protect farming.

State programs for protecting farming can be used by local governments to reinforce local efforts to protect farming. These programs include:

Reduced property or income taxes: Forty-eight states have programs to reduce property taxes farmers pay on their lands. Wisconsin and Michigan allow eligible farmers tax credits against state income tax liability if farmers enter into farmland protection agreements.

Agricultural districts: New York, Virginia, Maryland, Illinois and California permit farmers to set up voluntary agricultural districts. Once the district is established, farmers can receive special protection from nuisance actions by non-farmers, non-farm-related tax assessments, and non-farm public expenditures for capital improvements.

Planning and zoning: California, Oregon and Maryland have adopted strong planning and zoning requirements for local governments. In effect, these state requirements encourage planning and zoning in agricultural areas. Only Oregon makes it mandatory for local government to establish exclusive farm use zones. Wisconsin, through the income tax credit, gives incentives to local government to plan and zone agricultural areas for agricultural use.

Right-to-farm: Sixteen states have right-to-farm laws that can protect farmers from some nuisance suits arising from farm operations or some state or local government regulations hindering farm operations.

Policy statement: The Governor of Illinois issued an executive order directing the executive branch of the state government to recognize the state's interest in protecting farms and farmland. In Wisconsin, an agricultural impact statement must be prepared on most state or local actions that would result in the conversion of agricultural land to non-agricultural use.

Federal actions: Recently, the federal government has taken some steps designed to retain farmland in farm use. The Tax Reform Act of 1976 substantially reduced inheritance taxes on farm estates. Sixteen states have followed the federal lead in the reduction of state estate taxes on farms.

The Council of Environmental Quality, the Department of Agriculture, and the Environmental Protection Agency have all made policy statements in support of protecting farmland. These policy statements are important because they can influence relevant federal actions such as making grants and loans for various public services and facilities.

Four: HOW TO USE ZONING TO PROTECT FARMING

There are ten steps required to develop an effective zoning program to protect farming.

1) Create public awareness and interest in protecting farming.

2) Collect information on the nature of problems and on the contributions of farming to the community.

3) Determine goals to be achieved in protecting farming.

4) Determine which farmlands are to protect.

5) Prepare a farming protection plan.

6) Get the farming protection plan adopted.

7) Evaluate and select zoning tools to be used.

8) Draw up the zoning ordinance.

9) Get the ordinance adopted.

10) Administer, monitor, evaluate and adjust the adopted ordinance.

The steps discussed are the products of 57 years of combined experience of 10 communities with good programs.

Experience has shown that it will take between one and five years to complete steps 1 through 9. The exact time required depends partly upon the extent of citizen interest in and political support for protecting farming. If a consensus exists, a program could be enacted in a year. If not, more time is required.

Time is required to insure that citizens participate. If citizens don't materially participate, chances are any actions taken will not meet local needs. If actions do not meet local needs, they are unlikely to enjoy public support. Without public support, the success of the actions is jeopardized.

Some communities attempt to shortcut the time required by using model ordinances and model farming protection plans. The problem with these models is they are often adopted uncritically, even though they do not meet community needs. So, while a model might be easy to adopt, it will probably have little or no public understanding or support. At best, models offer a way to begin, not an instant solution.

It is important for citizens and officials to complete all ten steps in proper sequence.

1) Create public awareness and interest in protecting farming.

The origin of most successful local programs can be traced to one person. Typically, this is a political leader such as a county commissioner, but farmers, planning directors, and agricultural extension agents have also been prime movers.

These leaders use diverse and sometimes novel ways to stimulate interest in protecting farming. In Stow Creek Township, Cumberland County, New Jersey, for example, the Township Board circulated a questionnaire to residents. Ninety-three percent of the respondents wanted "specific efforts made to

preserve farmland." In other communities, leaders use the news media. Still others use the preparation of a new community plan or zoning ordinance as the vehicle for publicizing the issues. Small study groups, official and unofficial, have examined the issues and released their findings to the public.

Regardless of the leader or methods used, this initial step is typically the most difficult and frustrating. This is the time when the community struggles with learning more about protecting farming—what it is, what does it mean for us, how does it affect me, is there any issue at all? There is often little or no agreement on what the problem might be, much less what should be done about it. Discussions tend to be chaotic; no themes or threads connect ideas. Some people may see problems, but most either see no problems or simply don't know whether a problem exists or not.

Since the agricultural community shares the benefits and the costs of protecting farming, it is wise to get their participation. Failure to do so will likely lead to trouble. Some county planners in Minnestoa discovered this the hard way. The planners were instructed by the County Board to look into farmland protection. The planners took this as a mandate to prepare a plan and a zoning ordinance—which they did. Being in a hurry, however, the planners failed to seek out the advice or help of the agricultural community. When the plan and proposed ordinance went to the first public hearing, the chairman of the planning commission, a farmer, was astounded. The hearing began with the chairman asking, "You mean you're going to tell me what I can do with my land?" The farmer-chairman had no knowledge of the staff's work, and neither did other farmers. The proposal, after months of work and a cost of thousands of dollars, was tabled—indefinitely.

The best way to get the agricultural community to help is to ask for their help. One particularly good method is to form an agricultural advisory group composed of people representing various agricultural interests to serve for the duration of the process.

The Agricultural Advisory Committee of Tulare County, California, illustrates the key role that such a group can play. This committee first spelled out local interests in protecting farming and then went on to design important features of a farming protection plan and zoning ordinance. The committee continues to monitor and evaluate the performance of the plan and ordinance, and suggests changes to elected officials. Over the years, the committee has come to play such an important role in Tulare's efforts that the County Board and Planning Commission do not take action on agricultural matters without first referring the matter to the committee.

While the agricultural advisory group can play a central role throughout the ten steps, there still remains the immediate question of how to generate public interest and

awareness. Case studies showed that local officials and most citizens first became aware of and interested in protecting farming by hearing about and seeing problems of other nearby jurisdictions.

—In Walworth County, Wisconsin, officials noted the scattered sprawl of neighboring McHenry County, Illinois, and Waukesha County, Wisconsin.

—In Weld County, Colorado, officials saw scattered development in agricultural areas in nearby Boulder and Larimer Counties.

—In Stanislaus and Tulare Counties, California, officials pointed to Santa Clara County, at one time a leading agricultural producer, which now hosts sudivisions and electronics companies.

Several devices can be used to expose officials and citizens to the problems in nearby jurisdictions. One device could be forums sponsored by the National Association of Counties, the National Association of Soil and Water Conservation Districts, the American Planning Association or the National Association of Regional Councils. Short tours of the local farming area might be arranged. The community might sponsor a conference on protecting farming. Slide and tape presentations can be effective as would the testimony of officials and farmers from nearby jurisdictions.

Although citizens and officials usually first see problems in other jurisdictions before their own, some "refugee farmers" in the community can spell out many of the problems.

A refugee farmer is one who has moved his farming operation at least once because of suburban/agricultural conflicts. These refugees have first-hand experience with the problems, and are often among the first people to bring the problems to the attention of officials. The refugee farmer is often well-suited to take the issue to other farmers because his testimony is likely to enjoy greater credibility with other farmers than would a non-farming planner or official.

2) Collect information on the nature of problems and on the contribution of farming to the community.

This requires technical planning assistance. Usually the technical assistance comes from local planners, but many communities have relied upon regional planners, zoning administrators, agricultural extension agents, and consultants.

Technical people should have the ability to work well with people, a knowledge of local agriculture, and a knowledge of planning and zoning practices used in protecting farming. Of the three skills, the last is the most easily learned.

If funds are available, most communities favor hiring a planner or zoning administrator. If funds are limited, communities may be able to enter into cost-sharing agreements

with regional planning agencies or the Agricultural Cooperative Extension Service. Typically, consultants are used as a last resort and only for the preparation of the most technical planning work.

Once technical help has been found, problems identified in the community awareness step need to be spelled out. Detailed investigations should be made of the range of problems in order to choose which have highest priority. This means, for example, that if the community suspects that too much agricultural land is being converted to rural subdivisions, this problem should be analyzed. Data needed would be the number of new subdivisions, their locations, acreage taken out of production, quality of land taken out of production, effect of the subdivisions on adjoining farms and so forth. This spelling out of the problems is necessary to develop solutions. Conversely, if problems are not well defined and clearly understood, finding good solutions is difficult if not impossible.

The next task is to develop information on the importance of the agricultural sector to the community. Information ought to be gathered on the economic contribution of the agricultural sector to the local economy—the value of production, the number of jobs provided, income generated, investment in farm operations and the like; the role of the agricultural sector in the regional or state agricultural sectors—types of crops, animals, volume of products, market distribution, market share and special or unique agricultural products; and, the environmental and cultural contribution of the agricultural sector—the number, types and characteristics of fragile environmental lands in agricultural areas, open space preserved, historic, cultural or aesthetic resources and any other features peculiar to the area.

3) Determine goals to be achieved in protecting farming.

Goals of communities in protecting farming center on:

—Protecting farmland: protect designated agricultural lands from being converted to non-agricultural uses.

—Protecting farming operations: protect farm operations from being curtailed or restricted.

—Protecting the agricultural economy: encourage the development of the agricultural economy.

—Protecting fragile areas and open space: preserve sensitive environmental areas and rural landscapes.

—Controlling public service costs: guide new urban development into established population centers in order to control the costs of public services.

The most important requirement for this step is that the goals must reflect commu-

nity sentiment, not that of planners. The agricultural advisory committee could play a central role in setting goals or the community might undertake public hearings, citizen surveys, or other structured processes to insure that the goals reflect citizen sentiment.

The importance of setting goals is that they guide and shape the farming protection plan and the subsequent zoning ordinance. Thus these goals must reflect the interests of the community.

4) Determine which farm lands to protect.

This step involves selecting criteria to determine the kinds of farm land to protect, gathering the information to put the criteria on maps, and working with the maps.

In determining the farm land to protect, communities use agricultural and non-agricultural criteria.

Agricultural Criteria

Communities using agricultural criteria should consider:

1) *Soil quality:* In general, high quality soils ought to be included. Soil quality can be determined by examining local soil surveys prepared by the U.S. Soil Conservation Service. Often these surveys will group various soil types into capability classes ranging from Class I (highly productive) to Class VIII (least productive). County maps of prime farm lands are often available from the state office of the Soil Conservation Service.

2) *Farm productivity:* Some of the best farmers work the worst soils. Thus, many farming areas with poor soils may be under superior management and as a result be highly productive. These lands, because of their production, are just as valuable as those of high-quality soils and failure to include them is likely to result in sharp protest from the efficient farmers.

3) *Potential productivity:* Lands that are potentially productive, given the proper management practice or access to improved technologies such as irrigation, are often included as lands to be protected. To identify potentially productive farm land requires more subjective judgment than identifying lands already highly productive or land having high quality soils.

4) *Parcel size and shape:* Areas of large fields that are well-shaped for agricultural technologies are included. The definition of large and well-shaped varies from place to place principally by types of crops and methods of farming in the area.

Non-Agricultural Criteria

The communities that rely upon non-agricultural criteria take a residual approach in identifying lands to be protected. Communities identify all lands *not* suited to long-term agricultural production, leaving good agricultural land as the residual. The lands not suited to agricultural production are:

1) *Old urban lands:* All lands currently in urban uses.

2) *New urban lands:* Lands soon to be provided with urban services for future development.

3) *Poor soils:* Lands falling into the worst capability classes or land whose capa-

bility has been seriously damaged by poor farm management or non-agricultural uses such as mine reclamation.

4) *Fragile lands:* This category includes all environmentally-sensitive areas such as wetlands, steep slopes, or rocky areas that preclude agricultural production.

5) *Platted lands:* Once lands are platted for subdivision it is difficult to re-assemble the parcels for agricultural use. As a result, such parcels are usually deemed unsuited to agricultural production.

6) *Odd lots:* Oddly-shaped parcels are often unsuited to the technology of agriculture. This category includes parcels bisected by rail, highway, or other barriers (natural or man-made) leaving one or more areas unsuited to agricultural production.

7) *Small parcels:* When parcels are significantly smaller than surrounding parcels and are not in intensive agricultural use, the parcels may be unsuited to agricultural production.

8) *Vacant lands:* When parcels have not been tilled or otherwise used for agricultural purposes for five or more years, future agricultural production is unlikely. Typically, vacant lands are either owned by non-farmers or the lands lack agricultural capability.

9) *Poor investment lands:* Lands lacking significant agricultural investment over a long period often indicate declining commitment by owners to long-term agricultural production and an increasing commitment to non-agricultural use.

10) *Public land:* Lands owned by local government usually are not in agricultural use.

Few communities rely exclusively upon either agricultural criteria or non-agricultural criteria to identify lands to be protected. Most include a selection of both. If communities use only agricultural criteria, the outcome is likely to be heavily biased to include all lands in agricultural use, whether or not the lands are suited to long-term agricultural use. If communities use only non-agricultural criteria, too few agricultural lands probably would be included.

After selecting the criteria to be used, data must be gathered so that soils meeting the criteria can be delineated on maps. Given time and money constraints, communities generally elect to get information that is easily and cheaply obtained. Members of the agricultural advisory group can be particularly helpful in gathering this information. Usually reliable data sources include: U.S. Soil Conservation Service; U.S. Agricultural Stabilization and Conservation Service; local assessor; U.S. Geological Survey; county planning agencies; regional planning agencies; and state Departments of Transportation and Geological and Water Surveys.

Communities should be careful about spending too much time or money gathering new information. Most of the required information is available. It is a matter

of searching it out. Also, when information is lacking, communities should take advantage of the expertise they have. For example, soil surveys are very useful in identifying highly productive soils. In lieu of the survey, the same information may be gathered by having farmers review maps of the jurisdiction and identify the productive lands.

Maps are essential to evaluate lands. Generally, the scale of maps should be at 1/24,000 or less. It is useful to develop a base map and overlay maps, with each map (on clear plastic) showing lands having a criterion. As maps are overlayed, the lands to be protected will gradually emerge.

Once the information has been put on the overlay maps, it is crucial to get this information out to the community as quickly as possible. Extensive public hearings should be held and every advantage should be taken of newspapers, television, and other mass media in order to solicit public comment and critique on the lands selected for protection. Often, this public exposure will result in new information that will modify the information presented.

5) Prepare a farming protection plan.

The farming protection plan contains the discussion of problems prepared in the second step; the discussion of the contributions of farming to the community also prepared in the second step; the statement of goals from the third step; the list of criteria used to identify the lands to be protected from the fourth step; the map of protected lands prepared in the fourth step; and, a statement of policies to be used to achieve the protection of farming. The preparation of this statement of policies is the major task of this step. When completed, the farming protection plan will also be complete.

Policies derive first from the goals and then from the criteria used to delineate the lands to be protected. For example, if the goal is to protect prime agricultural land and the criteria selected is to protect all Class I, II, and III soils, then a policy might be to prohibit all non-farm development on Class I, II, and III soils. These policies, unlike the goals or criteria, are action oriented. If followed, the policies will lead to the achievement of the goals.

Policies should be developed for each of the goals. A goal may have more than one policy. The policies, in turn, will be used in later steps to select the zoning ordinance or other tools that will translate the policy into day-to-day decisions. The agricultural advisory group should have a major role in developing policies and every effort should be made to get public participation.

Although the farmland protection plan is a separate document, it is a part of the community's comprehensive plan. As such, the farmland protection plan and the comprehensive plan ought to be mutually consistent and reinforcing. If conflicts arise between the protection plan and the comprehensive plan, they should be ironed out before the protection

plan is officially adopted by the governing body.

6) Get the farming protection plan adopted.

Once the protection plan is prepared, integrated into the comprehensive plan, and subjected to public review, the plan must be adopted by the governing body. State laws generally provide specific procedures to be followed in adopting plans or amending them. Therefore, special care should be taken to follow the procedures. Communities should be careful about proceeding to the next steps until the plan has been adopted since the plan sets the basic framework for the steps that follow. If the plan is changed, the zoning ordinance and other tools that depend on it must also be changed.

7) Evaluate and select zoning tools to be used.

Successful zoning programs must respond to needs of local citizens. Some of the needs may be met when preparing the farming protection plan while other needs may be met in the zoning approach. If a community's program is so rigid that it doesn't respond to local needs and preferences, it is in serious trouble.

Farmers need to be able to separate the farmstead and other improvements from the larger farm parcel. This enables a farmer to sell the farm or improvements without selling the farmstead. By meeting this need, local programs account for the retirement of farmers and the demand for increasing average farm size. Zoning regulations should permit needed construction of additional housing on farmland for farm-related family members or farm employees. In addition, farmers want the right to sell small lots from unproductive areas of their farms. Farmers believe these lands should be made available for non-farm uses.

However, in providing non-agricultural uses for land not suited for agriculture, officials must be careful to avoid environmental degradation and interference with farm production.

Attention should be given to those tools which are concise and easy to understand. These simple and neat tools have the advantage of being readily understood by citizens. Little time or money is necessary to explain the tool itself to the public. Instead, emphasis can be given to showing how the tools redress community problems.

The difficulty with complex tools is that they often confuse officials and citizens alike, making political acceptance difficult to achieve. Instead of focusing on problems, attention is centered on the tools themselves. Thus, communities should be careful to select tools easy to explain and to understand. Otherwise, the entire program may be jeopardized.

It is wise to seek a balance between incentives and controls in the tools selected. Farmers will object to tools that have abun-

dant controls but no incentives. Restrictive zoning ordinances ought to be accompanied by such incentives as "right to farm" laws, property tax breaks, or other incentives that take the hard edge off of the controls.

Typically, communities have many possible tools. The difficulty is in selecting the appropriate ones. Thus, resources should not be expended on the development of new tools to protect farming until existing ones are evaluated.

Communities should use all of the tools at their disposal to redress farming protection problems. This is particularly important in rapidly developing areas where farm land owners are pressured to sell out to developers.

Tulare County, California, uses a multiple tool approach. Here, the county uses a comprehensive plan, a zoning ordinance, property tax breaks, and an urban boundaries agreement. Each of these tools serves a specific purpose and together they work to protect farming in Tulare County.

The comprehensive plan sets the basic land use plan. In California, the zoning ordinance must conform to the comprehensive plan, so the zoning ordinance turns the plan into law.

The differential assessment program reduces property tax loads on farmers, particularly those tax increases stemming from urban development.

The urban boundaries agreement between the county and its cities works to guide new development into the cities and keeps new development out of agricultural areas.

Any evaluation of zoning tools ought to begin with the two main zoning choices—(1) permitting or (2) not permitting non-farm homes in the protected area. If non-farm homes are permitted in the protected area, it is a non-exclusive agricultural zone. If non-farm homes are prohibited in the protected area, it is an exclusive agricultural zone.

In non-exclusive agricultural zones, non-farm homes are allowed—as a permitted use or as a special use. A special use means that non-farm homes may or may not be permitted depending upon the area, nearby farm operations, and parcel characteristics. Each proposed non-farm home is evaluated case-by-case according to an established list of criteria. If the proposed home meets the criteria, it is permitted. If not, the home cannot be built. In making decisions on special use non-farm homes, the following criteria are typically used:

1) *Soil quality:* If the home is to be built on high quality soils, officials tend to reject the application. If the parcel has low quality soils, the application might be approved.

2) *Parcel shape:* Parcels with odd shapes or other characteristics making them unsuitable for agricultural production may be suitable for non-farm use. However, if an application for a non-farm home would cut up a productive parcel, the application would likely be denied.

3) *Adjacent farm operations:* If nearby farm operations would be disrupted by a proposed non-farm home, the application would likely be denied. If no conflicts were identified, chances for approval would increase.

4) *Public service costs:* Non-farm homes in farm areas involve costs to the public. These costs are strongly related to distance. The farther the home is from public services, the greater the public cost. Thus, when a non-farm home involves substantial public service costs, the application may be denied.

This approach has high administrative costs because each application for a non-farm home must be evaluated. If all of the criteria are not applied evenly and consistently to each application, the protection program loses credibility. But so long as the criteria are all applied evenly and consistently, this approach will provide the flexibility and political support that many communities need for protecting farming.

When non-farm homes are a permitted use, (as opposed to a special use) communities use one of the three zoning techniques: large lots; quarter/quarter; or sliding scale. By using these techniques, communities set a density standard for non-farm homes in an agricultural zone. This density standard sets an upper limit on the number of non-farm homes to be permitted in the zone. Communities should start with a restrictive density standard to insure that agricultural land will be kept in agricultural production. If the standard proves too restrictive, it can always be lowered. If it is set too low, it is usually difficult to raise it. Worse, density standards set at one home per acre, or one home per two, five or even ten acres, will not protect farming.

Large lot zones set a housing density by establishing a large minimum lot size. In pratice, this minimum lot size has ranged from 10 acres to as much as 640 acres, depending on the density desired. Typically, communities use lot sizes of 35 or 40 acres. Large lot zoning has the advantage of being easy to administer, but the disadvantage of possibly chopping up the agricultural zone into parcels too small for efficient farming.

In a quarter/quarter zone (also known as a fixed area-based allocation zone) the number of permitted new non-farm homes is controlled by a set number of acres that entitle the landowner to one residential lot. Typically this is a quarter of a quarter section of land or 40 acres. Thus the owner of 40 acres would be entitled to one lot; the owner of 80 acres to two lots; the owner of 160 acres to four lots, and so on. Once the owner has developed (or sold) the lots (one per 40 acres) the owner has exhausted his zoning entitlement.

The minimum lot size of the entitled lots is typically one to three acres, considerably smaller than in a large lot zone. Therefore the landowner can achieve his full zoning entitlement by using up a small fraction of the land he owns. For example: the owner has 160 acres. He is therefore entitled to develop one lot for each 40 acres owned (four lots). If the minimum residential lot size were one acre he would only use up four acres in exhausting his zoning entitlement. This allows the clustering of non-farm homes and leaves large contiguous areas in agricultural production, which

may not be possible with large lot zoning. The ordinance should require that the farmer's unproductive land be used for the zoning entitlement.

Quarter/quarter zoning is relatively cheap and easy to administer. Control is simple. Use a map to mark off the zoning entitlements per parcel; permit one non-farm home for each entitlement; and mark the location of each home on the map.

Sliding scale zones (also an area-based allocation method) allocate home building rights by size of parcel owned. With the sliding scale approach, the number of dwellings allocated per acre decreases as the farm size increases. For example, in Shrewsbury Township, York County, Pennsylvania, the owner of a three-acre parcel in the sliding scale zone is permitted one home. The owner of a 10 acre parcel is permitted two homes. The owner of a 59 acre parcel is permitted only four homes — all on small lots. The advantages of the sliding scale approach are similar to those of quarter/quarter.

The crucial decision with large lot, quarter/quarter, or sliding scale is setting the density standard. If the density standard is set too low (typically, a 10 acre standard is too low) the agricultural zone may be divided into small, unproductive parcels. If the density standard is set too high, the agricultural zone proposed is not likely to have popular support.

In evaluating a proposed density standard for large lots, quarter/quarter, or sliding scale, the answers to the following questions are especially important. Will the community rely upon zoning alone to protect farmland or will other tools be used to supplement zoning? If zoning is the only tool used the density standard should be carefully chosen since farmland will be protected exclusively by zoning. If, however, other tools are used to restrict non-farm homes, the density standard selected is not as crucial. What is the range of parcel sizes in the area? If most of the parcels are from 60 to 100 acres, a 10 acre density standard would be too small and a 120 acre standard would be too large. So the range of parcel sizes and their distribution sets the broad limits when selecting a density standard. What is the density standard necessary to deter premature rural subdivision? Existing rural subdivisions provide clues about the market for varying sized rural lots. Developers can also provide information. The main point is to select a density standard which is well above that of the current market for rural lots.

The exclusive agricultural zone will help reduce potential conflicts between non-farm residents and farmers. This zone encourages retaining large blocks of agricultural land in agricultural use by prohibiting small non-farm residences from significantly reducing land in agricultural areas. Exclusive zones are difficult to get adopted because they pro-

hibit all non-farm homes. Most landowners resent such a total prohibition and fight against its adoption. The exclusive zone also has higher administrative costs since each proposed home in the zone must be evaluated case-by-case to insure the home is for a farm purpose.

In a survey of 247 communities using zoning to protect farming, only a few used exclusive agricultural zones. These exclusive agricultural zones usually require that: non-farm homes are prohibited in the protected area; the only residences permitted in the zone (aside from residences existing before the exclusive zone was adopted) are farm homes; and, in order to build a farm home, the petitioner must demonstrate to the zoning authority that the home will be used for farmers or farm employees. Documents such as loan statements, farm management plans, tax assessor records or other evidence can be used to establish that the home will be used as a farm residence.

8) Draw up the zoning ordinance.

In this step the zoning text and map are drafted. The text includes the key zoning features identified in step 7, and the zoning map should conform to the farm land protection map prepared in step 4.

In drafting the zoning text, it is generally useful to review the texts of similar agricultural zones adopted by other communities. However, care must be taken to avoid copying the text from other ordinances. Instead, each section should be analyzed so that only relevant material is used.

The statement of purpose for the agricultural zone should identify agricultural goals. The goals will aid people who read the ordinance to understand why it was adopted. Care should also be taken in drafting the list of permitted and special uses. In general, the list of permitted uses should be limited to agricultural uses and permitted non-farm homes. Non-agricultural uses, such as churches, power stations, or other community type uses ought to be special uses or excluded from the zone. Similarly, large scale agricultural uses such as feedlots ought to be made special uses so the community can retain some control over their location and possible adverse effects.

It is also wise to spell out the criteria for evaluating special uses in the ordinance text. The criteria should follow those identified on page 20.

In drafting the zoning map, particular care must be given to the boundary lines of the relevant agricultural zones. The boundaries must be clear so that property owners are able to determine from the maps if their properties are in the agricultural zone. This argues for a map scale of about 1/400 since, at this scale, property features are easily determined. Many communities have discovered that aerial photographs at the correct scale are especially useful.

Once the text and map are prepared, they should be reviewed by someone knowledge-

able in state land use law. In particular, communities should give attention to four items to minimize legal problems:

1) The ordinance must be consistent with the state enabling legislation, which grants communities their planning and zoning powers. Planning and zoning actions taken by the community must be within the powers granted to them.

2) The ordinance must be consistent with the comprehensive plan. If communities follow the steps as set forth here, this consistency will be obtained. In any event, it is worthwhile to review goals, policies, and the farm land protection map to insure that the ordinance, text and map, conform to the comprehensive plan.

3) If the ordinance is properly authorized and consistent with the comprehensive plan, the principal constitutional hurdle remaining is whether or not the zoning ordinance results in a taking of private property without just compensation. One question here is whether or not the ordinance has the effect of significantly reducing the market value of the land covered under the zoning ordinance. If the land can be used for a reasonably profitable purpose (not necessarily the most profitable), many state courts would find the ordinance valid. Communities should also take note of a recent Supreme Court decision in *Penn Central Transportation Co. v. New York* where the Court found a zoning ordinance valid even though it reduced sharply the value of a private property.

4) The community should review its zoning ordinance and comprehensive plan to insure that adequate provisions are made for all types of housing. In particular, the ordinance and plan must not exclude low income housing from the community. Thus, while the community can adopt an ordinance to protect its agricultural land, it must insure that land is available elsewhere in the community for low income housing. The amount of land to be set aside to meet low-income housing needs should be based on regional demand.

9) Get the ordinance adopted.

As with the protection plan, state law sets forth specific procedures that must be followed in adopting or amending a zoning ordinance. In most cases, communities will be amending an existing ordinance rather than adopting a new one. This is because the new agricultural zone regulates the community's agricultural areas and not other residential, commercial, or industrial areas regulated by other zones.

Although state law typically requires only a few public hearings on the ordinance before it is adopted by the governing body, it is wise to give the ordinance wide public exposure. This is to insure that key public interest groups understand the ordinance and why it was adopted. If, as recommended, a continuing effort has been made to take the program to the public and to involve the public in its development, the required public hearings should not generate much controversy and misunderstanding.

10) Administer, monitor, evaluate and adjust the adopted ordinance.

One of the worst mistakes local officials make is to conclude that once a plan is adopted and a zoning ordinance passed, their work is done. Actually, many communities have found that the most difficult work of administering, monitoring, evaluating, and changing the zoning provisions begins almost as soon as the plan and the ordinance became law.

Two items that can cause problems, even in an excellent zoning program, are re-zonings and parcel splits.

Re-zoning is a change of zoning designation, say from the agricultural zone to a residential zone. Once an agricultural zone is adopted, officials can expect a flood of re-zoning applications to test official's resolve to protect farming. It is important that officials adopt a list of criteria for evaluating proposed zoning changes, and apply these criteria evenly to each proposal. When re-zonings are easy to get and are granted to landowners routinely, the agricultural zone is subverted.

The main criteria should include:

1) Parcel size, shape, suitability for agriculture or non-agriculture use. (See page 20)

2) Proximity to cities: The closer the parcel is to established population centers, the less likely it is to be retained in agricultural use. Conversely, if the parcel proposed for re-zoning is distant from population centers, it probably should be denied.

3) Plan conformance: The proposed re-zoning should be in conformance, if it is to be approved, with the farming protection plan.

4) Compatibility with farming: (See page 20).

5) Public service cost and availability: (See page 20).

6) Environmental impact: Is the land under consideration environmentally suited to the proposed use? What will be the environmental impact of the proposed use on nearby farms?

If these criteria are adopted and applied consistently, re-zoning decisions are not likely to subvert the intent of the agricultural zone. Officials will discover that once several landowners have gone through the process, the testing period will be over. As zoning decision-makers make good track records in re-zoning, the word gets out. The officials may then discover that they are approving a high rate of re-zoning petitions because only the reasonable cases are filed.

Parcel splits must also be monitored and handled carefully. Many states provide that a single parcel may be split or divided into four or fewer lots so long as the resulting lots are above some minimum size set forth in the state statute. Problems with parcel splits arise when the resulting lots do not meet zoning requirements and are exempt from the zoning

requirements. Local officials believe these exemptions are necessary to assure equity that the zoning ordinance denies.

For example, an agricultural zone with a 40-acre minimum lot size requirement will not allow a farmer who retires to sell his farm and live on his farmstead, since the farmstead is less than 40 acres. Similarly, the agricultural zone would not allow a farmer to sell his farmhouse separate from his farm and to build another house on anything less than 40 acres. Also, if a farmer retires and wants to move, it could be difficult to sell the house because only those people who wanted and could afford both the 40 acres and the house could buy them.

While the intent of such exemptions is good, the effects may be bad. Such exemptions are sometimes used by unscrupulous people who simply want to split their land and turn it into non-farm homes for a quick profit.

It is difficult for officials to decide which cases meet reasonable farming needs and which do not. Communities can, however, put time limits on parcel splits so that once any parcel is split, the resultant lots may not be split again for a period of time say for five or 10 years. Communities should also specify (as is done in evaluating re-zonings on page 25) the criteria for evaluating parcel splits. The community should also ensure that the density standards in the agricultural zone conforms to average parcel size. This will discourage landowners from splitting their parcels down to the minimum lot size in order to sell the lots for non-farm uses.

Although parcel split regulations create many problems, they are often necessary to gain sufficient political support to get a farming protection program adopted and to administer the program equitably.

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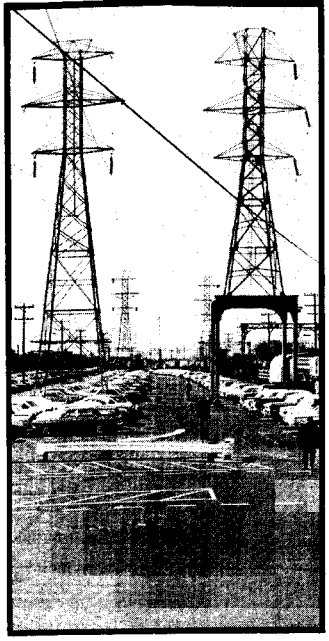

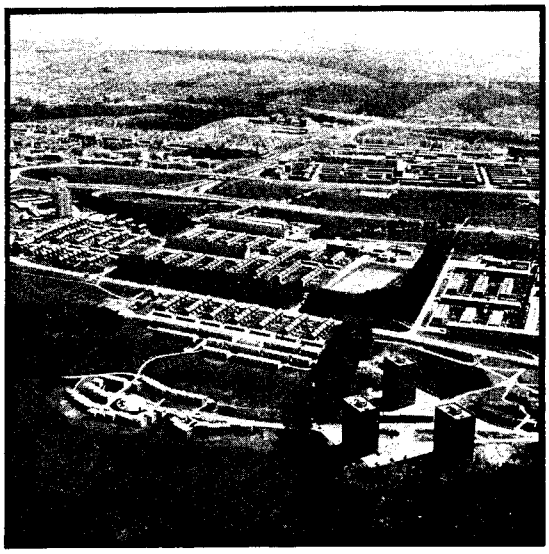

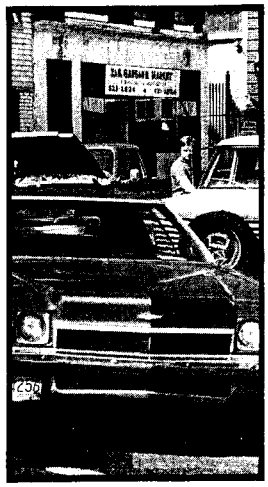

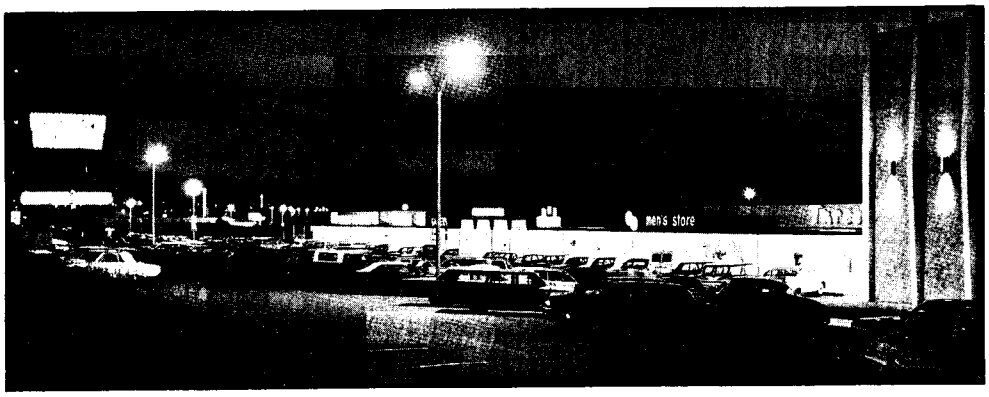

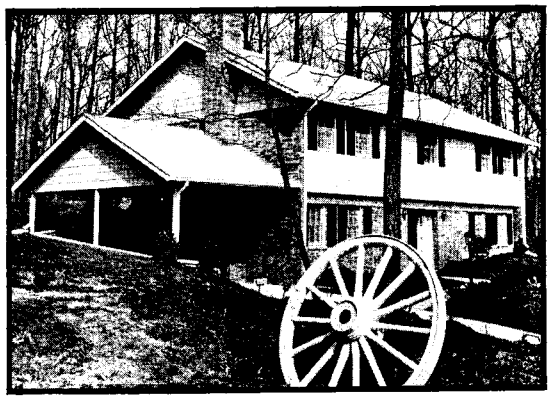

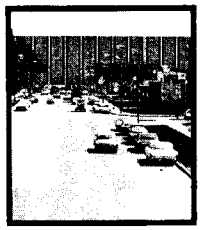

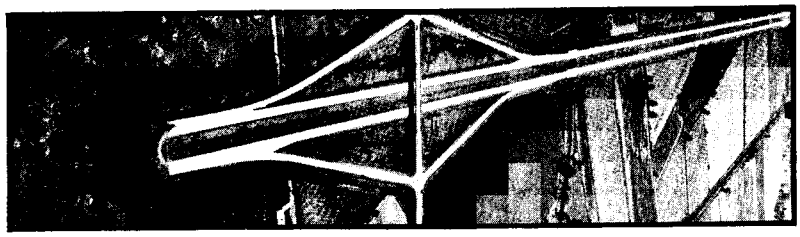

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