



# Regional farmland protection: The Twin Cities experience

By Darrell Napton

**M**INNESOTA'S Metropolitan Agricultural Preserves Act may be one of the most effective farmland protection programs in the nation. A number of state-level farmland protection programs have proven quite effective (4, 5, 6, 17), but this program functions at a regional level, enabling it to meet local needs. Farmland owners have responded by enrolling more than 178,000 acres in Metropolitan Agricultural Preserves (MAP).

The Minnesota program encompasses a seven-county area that includes Minneapolis and St. Paul, their suburbs, and the surrounding countryside. This region has more than one million acres of farmland, of which nearly one-fifth (17 percent) is enrolled in the MAP program and an additional 431,000 acres are eligible if the owners choose to enroll (10). The Metropolitan Agricultural Preserves Act provides a state financial

framework and authorizes the Metropolitan Council (the Twin Cities regional planning organization) to coordinate long-term farmland protection with local governments.

MAP is part of a new class of farmland protection programs that attempt to affect the location and timing of urban-influenced, nonfarm development by linking the state, region, town, and individual landowner in a web of commitments designed to stabilize and slow land use changes in the urban development frontier. It provides a comprehensive approach to farmland protection that might be used as a model for other states that are developing or improving similar programs (17).

## Agricultural changes and responses

The Twin Cities are on the northern margin of the corn-soybean belt, the largest and most productive farming region in the nation. Agriculture is the most extensive use of land in the metropolitan area. Cash grain farming is common, and part of the region is within the Wisconsin-Minnesota Dairy Belt. The soils, climate, and economic structure also support a major commercial

vegetable industry, as well as the nurseries and truck farms normally associated with a large city. The high proportion of intensive, specialized farms in the metropolitan area has resulted in Twin Cities farms' contributing substantially more to the state's agricultural economy than the area in farms would indicate (13).

Concern for Twin Cities farmland evolved during the rapid urban growth of the 1960s and 1970s, when population increases and new highway construction thrust previously distant farmland into the urban commuting field. Migration to the Twin Cities increased the region's population to more than two million. Today the Twin Cities region accounts for half of Minnesota's population. Highway accessibility speeded up the conversion of farmland to nonfarm uses (7, 18). Easy access to the central cities seemed to be an important criterion when people searched for places to live beyond the suburbs. By 1967 the entire Twin Cities metropolitan area was easily within a one-hour drive of downtown Minneapolis (1). As the built-up area grew larger and the regional highway system became better, the quantity of farmland within easy commuting distance from the cities' outer edge increased enormously. The new highways fostered a more dispersed population distribution, and rural subdivisions and hobby farms became common within the commuting field.

Nationally, concern about premature farmland conversion peaked during the late 1970s, when excessive low-density, urban fringe growth was thought to jeopardize national food and fiber production (14, 3). In the Twin Cities region, these anxieties were exacerbated by concerns that low-density development might threaten the region's groundwater supply, impair the quality of life, and possibly bankrupt the region with excessive demands for regional service extensions, particularly sewer. The Metropolitan Council discovered that premature farmland conversion could threaten regional growth control efforts, that even scattered-to-moderate exurban growth raised land values and property taxes, and that this growth typically had a greater impact than the size of the area converted suggests. These realizations also could engender in farmers' minds a sense of uncertainty about the long-term viability of agriculture when making major planning and investment decisions.

Farmland loss was recognized as a multifaceted problem that defied a simple solution. Local planning efforts had been easily overwhelmed by the scale and rapid pace of urban growth. Local farmland protection policies could not prevent the areawide population and land use changes that led to higher

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tax assessments, declining agricultural infrastructure, and increased uncertainty among farmers. Single-technique strategies to protect farmland also were unsuccessful at the urban development frontier, where local geography, local policy, and a myriad of landowner and developer motivations produced a kaleidoscope of land use options and actions too complex to be managed by a single, local technique.

Regional application of a multiple-technique strategy was suggested as a remedy for the ineffectiveness of local farmland protection programs, the unlikelihood of significant federal farm protection assistance, and local fear that state or federally administered programs would be unresponsive to local conditions (4). The courts also sanctified a regional solution to urban sprawl, an objective that well-defined the urban farmland protection program's complement (16). Nonetheless, a feasible regional farmland protection program may be impossible to implement without local support.

The Metropolitan Council garnered local participation and support by turning to a citizens' Rural Area Task Force to outline a locally endorsed regional farmland protection program that would receive state authority and money. After the task force made its report, the legislature sought additional local opinions while drafting the Metropolitan Agricultural Preserves Act. To maintain local support, the state furnished guidelines in the law but allowed implementation decisions to remain at the local level. This response to local conditions, while assigning to the state level the political responsibility of developing a program that might have local opposition, may have improved the likelihood of winning local political and business community support.

### Metropolitan Agricultural Preserves

In 1980 the Minnesota legislature passed the Metropolitan Agricultural Preserves Act (12). The purpose of MAP was to ensure that urban farmland would be no more vulnerable than rural Minnesota farmland to non-farm conversion forces (15). MAP combines tested techniques in a state-supported, regional program. Many of these techniques had failed in other locations when implemented singly at the local level because urban growth extended beyond municipal boundaries, but most local leaders were concerned only with their individual communities (2).

The most effective method of alleviating local apprehension about a regional farmland protection program may be to have local governments share land use control with regional or state agencies (19). MAP accom-

plishes this multiscale linkage by integrating local implementation with regional administration and a state financial framework. The state annually reviews the agricultural preserves program and provides some financial support. The Metropolitan Council oversees MAP by certifying compliance with the regional plan, educating the public about the program, encouraging farmland owner participation, monitoring participation, and preparing an annual report to the legislature. The local government with zoning authority implements the program by selecting which land to designate as eligible, managing the application process, and enforcing the act. Individual owners of eligible farmland then choose whether to participate in the program.

To create an agricultural preserve, the local government with planning and zoning authority—a county, municipality, or township—certifies land as eligible. This land must be designated in the comprehensive plan as "long-term agricultural land," and zoning must limit residential density to one unit for each quarter/quarter section. The normal minimum size of an eligible parcel is 40 acres, or 35 acres when a public road right-of-way has reduced the size of a quarter/quarter section. Under special conditions, parcels as small as 20 acres may be deemed eligible. Local governments may permit residential clustering in an agricultural preserve as long as the overall density does not exceed one house per 40 acres.

Landowners with certified land who choose to participate in the program sign an eight-year restrictive covenant to keep their land in agriculture and to farm according to sound soil conservation practices. The local government also signs the covenant and agrees to keep the land in agricultural zoning for at least eight years. These restrictions and the zoning entity's right to keep land zoned "agriculture" indefinitely effec-

tively preclude short- and intermediate-term speculation by land developers.

Each March, if neither the landowner nor the government has initiated withdrawal proceedings, the contract renews itself for another year. This assures that both the landowner and local community will have at least eight years to plan for nonfarm land use changes. To maintain their land use options, many participants initiate expiration notices at the same time they enroll in MAP, but they have a two-year window during which they may rescind the expiration and thus extend the contract beyond the original eight years. If ownership changes, the agricultural preserve restrictions remain with the land. After the landowner and the local government sign the contract, the local government notifies the county recorder, auditor, and assessor so that the preserve can be recorded, assessed, and taxed according to provisions of the law. The Metropolitan Council and county soil and water conservation district also are notified.

To strengthen urban agriculture and to encourage landowner participation, the new law provides several benefits to owners of certified farmland who choose to enroll in the program.

- ▶ The land is assessed as farmland only, rather than at its market value.

- ▶ The tax rate is not more than five percent higher than the average of rural Minnesota tax rates.

- ▶ Any nonfarm considerations that would increase the assessed value of the land, except house, are discounted.

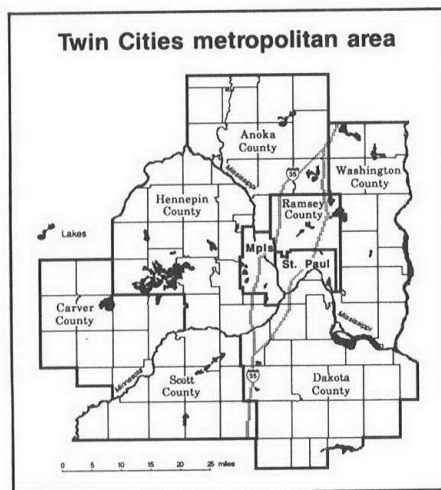
- ▶ Water and sewer assessments are expressly prohibited, as in the Oregon program (4).

- ▶ If farmland tax rates exceed the statewide average by more than five percent, the difference is deducted from the landowner's tax bill and paid by the county from a special conservation account. Tax savings for the farmland in MAP range from less than \$1.00 an acre to more than \$8.00, with an average savings of slightly more than \$3.00 an acre (10). Greater savings usually are realized on farmland that is closer to the urbanizing edge.

- ▶ MAP land is protected from unreasonable or restrictive local farm ordinances, such as noise or odor regulations.

State agencies are directed to support and encourage viable farming in agricultural preserves.

Because municipal annexation is often a prelude to nonfarm development, municipalities are not allowed to annex township land in agricultural preserves, and farmland cannot be taken through eminent domain proceedings unless a strong case can be made that the public need is for a parcel



of land of 10 acres or less.

To finance MAP, each of the counties that has land in the program must levy a \$5 fee on deed transfers and mortgage registrations. Half of the money collected is used to pay for MAP tax credits; the other half is transferred into a state conservation fund. Counties that do not process enough deed transfers and mortgage registrations are able to draw from the conservation fund to pay the tax credits. Counties with a surplus after paying for the tax credits keep the excess money but can use it only for conservation projects. If the state conservation fund is too small to cover all deficit county tax credits, the state general fund pays for the difference. In 1987, total tax credits were \$484,000; \$117,000 of that was provided by the state general fund.

MAP does not stand alone. It complements and is complemented by other Metropolitan Council policies that control growth and enhance the region's quality of life. Among other things, the Metropolitan Council coordinates Twin Cities highway and airport improvements, oversees the public transportation system, directs sewer placements, and manages a system of regional parks. The Metropolitan Council may be the most powerful and comprehensive regional planning organization in the nation, but it has no direct zoning authority that would support its ability to oversee farmland protection. It does, however, exercise some indirect control over local land use planning and zoning under provisions of the Metropolitan Land Use Planning Act (11). This

complement to MAP requires local governments to establish comprehensive land use plans that are "consistent with [the] planned, orderly and staged development" of the regional services the council oversees. These plans must be based on population, employment, and housing projections that the Metropolitan Council provides to each community. Unlike the Wisconsin and Oregon farmland protection plans, eligibility for protection under MAP is not based on soil classification, but rather on consistency with the regional land use plan (5, and 6).

The land planning act contains an agricultural component that requires local plans to designate the location and proposed uses of any farmland, including protected farmland. By using its ability to restrict capital expansion plans for urban services, the Metropolitan Council forces local governments to develop comprehensive plans in compliance with regional growth management guidelines. The council may reject or modify any local plan not in compliance with the regional plan and projections. The council thus can prevent a local government from certifying land for MAP in a growth area designated to receive regional services, but it cannot mandate the creation of a preserve.

Before enactment of the land planning act, only 50 of the 200 local governments that had zoning authority had prepared comprehensive plans (14). This provision stimulated a great deal of local agricultural planning and zoning for long-term farmland. Today, all local governments have a comprehensive plan, most of those with significant

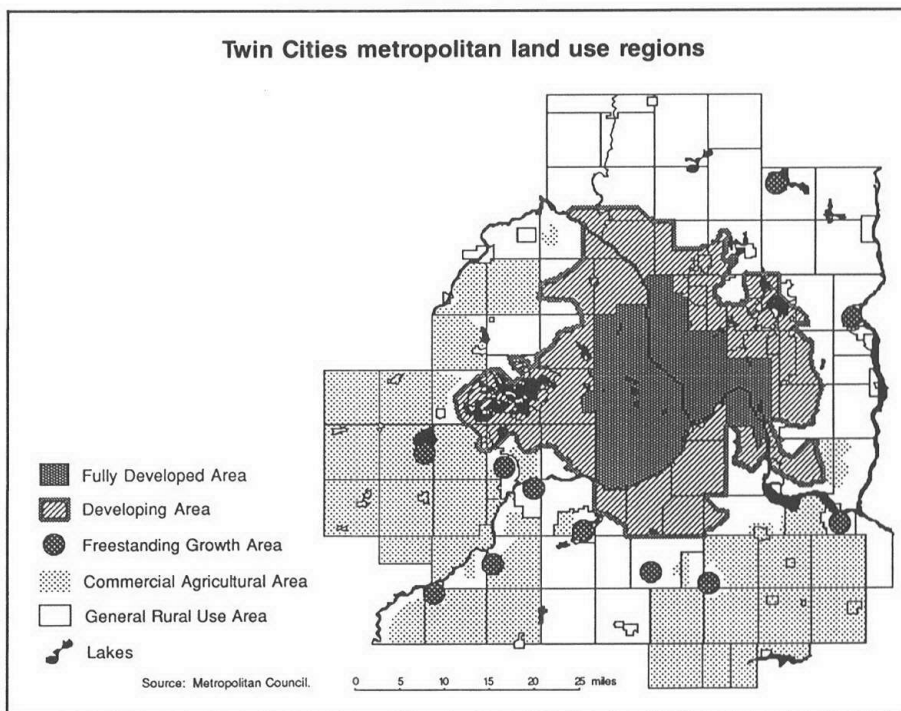
rural areas have agricultural zoning, and 57 of them have certified land eligible for MAP.

### Impact of agricultural preserves

The Metropolitan Council designates areas that do not receive regional services, particularly sewer hook-ups and highway upgrading, as the Rural Service Area. This area is further subdivided into towns, the General Rural Use Region, and the Commercial Agricultural Region. The General Rural Use Region comprises land that is either close to the urbanizing edge or has marginal soils. The regional plan designates this area for hobby farms, parks, exurban residences, and commercial farms that can withstand the pressures of operating near the urban edge without public assistance (8). No urban services are to be provided in most of this area in the future. The farmers in this part of the metropolitan area presumably are under the most pressure from nonfarm developments and could benefit most from the Agricultural Preserves Program.

For instance, south of the Minnesota River along Interstate 35 and in parts of southern and eastern Washington County are strong farming areas with good soil. The farms in these areas are experiencing powerful non-farm development pressures, but the local zoning authorities have not designated any land for long-term agriculture. Most communities in this region chose to certify little or no land for long-term agriculture. Only 20 of the communities have certified some land as eligible for MAP, and many of the parcels are scattered and evidently were certified on a case-by-case basis for the farmland owners who desired to enroll (9). After the communities designated these scattered lands as long-term farmland, the Metropolitan Council revised the Commercial Agricultural Region to include all MAP land.

Most MAP participants are from the original Commercial Agriculture Region, which the council designates for long-term agriculture. This area generally includes the Twin Cities' best soils and largest farms. Most of these farmers cannot benefit from the special assessment provision of MAP because they are too distant from the urbanizing edge to be threatened by urban service installations. But nonfarm demands have been incorporated into farmland prices. Land purchases by nonfarmers have pushed land prices above their agricultural value, so these owners can save some tax money by enrolling. Yet fourteen of the minor civil divisions that have areas of commercial agriculture have certified little or no land as eligible for MAP. Likewise most of the region's least-threatened farmland in the southwestern, southern, and southeastern



part of the urban area is protected.

Although no one knows for sure why few communities in the urban fringe chose to certify long-term agricultural land even when urban service provisions is not expected, these communities, and perhaps the farmers as well, may be anticipating that the next surge of growth will offer them speculative land market opportunities. This apparent conflict between regional and individual/local community goals may jeopardize the efficacy of MAP. The intent of the program is to change the behavior and attitudes of governments and people, especially farmland owners. The behavior change should be reflected in changing land use. Even though MAP may be one of the most comprehensive farmland protection programs in the nation, the relatively few eligible acres that farmland owners have enrolled in the program and the location of the farmland that local governments have certified as eligible gives rise to questions about its effectiveness.

### Location and timing impacts

MAP is a new type of metropolitan farmland protection program (15). Its goal is to influence the location and phasing of nonfarm development at the urban fringe. Houses can be constructed within agricultural preserves, but extremely low density must be maintained. Communities decide where to allow subdivisions and must plan the location and timing of local sewer mains and city streets in accordance with the regional plan that governs the timing and location of regional sewer interceptors and arterial streets. Communities are prohibited from permitting subdivisions or water and sewer services in areas that have been zoned for long-term agriculture. In addition to protecting farmland, these provisions were made to ensure that regional resources for infrastructure development are not overtaxed by premature, low-density, or noncontiguous developments.

MAP does not necessarily keep nonfarm land use changes distant from active farmers because some communities continue to spot zone long-term agricultural land, because individual landowners must decide whether to create a preserve, and because preserves may be as small as 40 acres. Within an agricultural preserve, however, urban influences should be greatly reduced, enabling a willing farmer to compete without having to overcome all of the burdens of being near a growing urban area.

MAP influences the timing of nonfarm growth by prohibiting development within agricultural preserves for a minimum of eight years. The assumption is that par-

ticipating landowners will feel less risk in borrowing money or making land or capital investments because of the assurance that zoning will remain agricultural and that nonfarm special assessments and other farming constraints will be prohibited.

The eight-year contract is designated "long-term" in the law, but, for farmers, eight years is actually a medium length of time. Many farm investments require commitments of 10 to 20 years. Neither a new dairy barn nor a center-pivot irrigation system could make a profitable return on investments in eight years. Carver County, the most agriculturally oriented in the region, defines long-term agricultural land as 10 to 15 years. Eight years, however, is as long as most landowners want to commit themselves (13). Apparently they either want to maintain some flexibility in case their personal situation changes or they remain somewhat skeptical about committing themselves to an untested program.

Because individuals choose whether to participate or not participate in MAP, the resulting enrollment pattern is one of spot-zoning, with many, if not most, participants bordering at least one nonparticipant. A more lengthy contract term might lock owners into farming while neighboring land uses change. Though eight years may not be "long-term," the eight-year time clause should minimize farmland owners' response to short-term market and policy fluctuations.

The eight-year window of stable land use also gives the local community an opportunity to concentrate its infrastructure investments in areas not zoned for long-term agriculture without fear that farmland owners who experience unexpected personal or financial changes will create a demand to rezone farmland to higher intensity uses and thus threaten to disrupt local land use and fiscal planning. The eight-year notification that land will be withdrawn from MAP permits both the landowner and the community to make medium-length land use plans.

### A check and balance

MAP is a compromise that provides a type of check and balance. Once both the landowner and the governing body agree upon the need for farmland protection, each receives an eight-year, stable planning horizon. Essentially, agricultural preserves allow eligible farmers to zone themselves for "long-term" farming, if they choose. The eight-year commitment provides them with immunity from the zoning and governing boards that routinely grant variances when presented with nonfarm land use changes.

Unlike some programs, MAP does not directly protect productive farmland. The

implicit assumption of the law is that, if a lot of farmland is protected, a lot of *productive* farmland will be protected. MAP is not just a strategy to protect agriculture. It is also a regional growth management tool that, as a byproduct, supports local fiscal and individual financial planning. MAP might best be viewed as a program to enable farmland owners to adjust the timing of their eventual land sale to their personal situations, while giving communities an opportunity to plan the timing and location of growth.

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# Farmer ambivalence to rural land conversion in Australia and America: Regulatory implications

Roy E. Rickson, Geoffrey T. McDonald, and Ronald Neumann

**ABSTRACT:** Conversion of agricultural land to urban uses poses continuing problems in Australia and in the United States. This study reports data on Queensland farmer responses to government planning, comparing them with a study in Iowa. Farmers in both countries prefer regulatory models that stress voluntary compliance rather than enactment and enforcement of law. Farmers' ambivalence about controlling land conversion is based on both traditional agrarian beliefs and rational economic interest. In Queensland, entrepreneurial farmers, committed to farming as an occupation rather than as a style of life, are most supportive of government action to control rural land conversion.

AS urban centers grow, agricultural land is increasingly attractive to developers. Farmers near expanding urban centers express concern about the loss of good farmland, but they are motivated to sell because of high land values and the uncertain future of commodity prices. Rural land conversion is an example of conflict between short-term economic interests of individuals—in this case, farmers—and society's general need to preserve farmland for future generations. Government land use planning and regulations are designed to influence farmer decisions to sell, but enforcement is a continual problem. Farmers are ambivalent about public programs that may restrict their proprietary rights.

Although American and Australian farmland has been lost to urbanization, this is seen more as a local problem than a national problem (13). Neither country has a comprehensive national policy to address the issue of farmland diversification emphasizing the political importance of local farmer opinion. Planners and researchers disagree about its seriousness, and farmers differ over how much planning is necessary to deal with

rural land conversion, what level of government should have the most authority, and whether farmers should share land use decision-making with government (4, 13, 16).

Here, we present data on Australian (Queensland) farmers' attitudes to rural land use planning and their ambivalence about the government's planning role. These data are compared with the results of studies in the United States (5, 6) and discussed in the context of their importance for understanding the success or failure of government programs to conserve productive rural land.

## Agrarian ideology

Farmers in both countries agree that farmland is intrinsically valuable and that rural life is natural and good (9). Agriculture developed differently in the two countries, of course, but farmers have similar beliefs about the rights of ownership. Government involvement in farming is acceptable as long as it does not infringe on property rights, including the right to sell to whomever they please for whatever purpose (7, 12). Arguments that the rights of property are ultimately derived from their tendency to promote the public good strongly support such beliefs (3, 11). Ironically, such views can lead farmers and others to devalue rural land as they directly challenge the basic

agrarian concepts that farmland and soil are intrinsically valuable and that agriculture is the land's highest purpose.

## Rational farmers and regulation

Public rural land use law and policy are central to farmer decision-making. Farmers may accept them as legitimate constraints on self-interest, or as perverse intrusions, or they may simply feel that they can ignore these laws and policies because governments cannot or will not enforce them. Australian governments have been guilty of excessive timidity in enforcing legislation (2). In general, though, land use planning is a political reality and "the question is not whether, but only when, the use of private property may be restricted in the public interest" (2). How farmers react to planning and agency initiatives demonstrably affects how and when agencies decide to enforce law and policy. But predicting how farmers will respond to land use planning is often difficult because it has a "dual aspect" for them, thereby establishing a basis for farmers' ambivalence to both government and planning (13).

International research shows farmer variance to government land use restrictions; their reactions range from active resistance, to ambivalence, and support, when it is in their economic self-interest. A study in Iowa concluded, "Farmers continue to espouse values that are being eclipsed in the land use planning movement, such as the sanctity of private property rights and reliance on the free market to determine land uses" (5).

McDonald and Rickson (13) found that Australian farmers are ambivalent about land use planning. They strongly support government regulations prohibiting farmland conversion to other purposes, but they also reject the idea that public interests should be given a higher priority than owner economic self-interest in deciding land uses. Farmers themselves often are inconsistent about these two values, as the following statement indicates: "Land use planning is vital to ensure that productive land is preserved for the future of all Australians. I believe a farmer should have the right to sell his farm to the highest bidder."

Rural ideology contains contradictory elements associated with rural land use and the value of rural lifestyles. Is conservation more important than the freedom to sell land to the highest bidder? Should one stay with the "good and natural life of farming" even though a better income could be earned in another occupation? The ambivalent attitudes of farmers to land use problems and land use planning can be partially understood in this light (13).

Farmers are "rational" within the context of agrarian ideology and market forces.

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