



Soil Conservation Service Photo by Wilson

Development on prime farmland in King County, Washington.

Farmland protection policy: The critical area approach

By Greg C. Gustafson

A growing awareness of the failure of use-value assessment as a land use policy instrument has resulted in a search for more direct approaches to reducing the conversion of highly productive farmlands to nonfarm uses (11, 15, 19, 24, 27). The design and implementation of effective mandatory regulatory programs, however, is no easy task. The main obstacles to be overcome are the burden on the public purse of compensatory regulation and the constitutional validity and/or political acceptability of noncompensatory regulatory approaches.

Much of the attention thus far in the search for more direct approaches to farmland protection has been devoted to

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the design and refinement of compensatory regulatory programs, particularly those in which the market rather than the public treasury provides landowners with compensation for regulation-induced reductions in property value (4, 10, 14, 16, 25).

Comparatively little attention has been given to the design and refinement of noncompensatory regulatory programs for farmland protection. Ignored especially has been the question of how to overcome the issues of constitutional validity and political feasibility.

To increase both the constitutional validity and political viability of noncompensatory regulation in rural land use control, it may be necessary to restrict the scope of regulation in controlling farmland conversion. One way of accomplishing this is to narrow the focus of noncompensatory regulation so its reasonableness is obvious enough to overcome political resistance.

The "critical area" approach to farmland protection represents a land use management vehicle for both narrowing the scope of noncompensatory regulation in controlling farmland conversion and for providing a state role in the regulation of those farmlands designated as important statewide. The concept is receiving more and more attention in land use circles in the United States (12, 17, 18, 20, 21). Its application to regulating the conversion of farmland to nonfarm uses, however, has not been fully explored and thus deserves more thorough examination.

The critical area concept

The critical area concept grew out of the idea that states should take back some of the land use management authority historically delegated to local governments. The notion that land use decision-making

authority over some kinds of land areas and some kinds of development should be transferred to the state level first achieved formal recognition in 1968 in the Report of the National Commission on Urban Problems (21). The concept was later refined and incorporated into the American Law Institute (ALI) Model Land Development Code. It was also included in the national land use planning assistance legislation considered in the 93rd and 94th Congresses.

The critical area approach, as embodied in the ALI Model Land Development Code, involves state designation of "areas of critical state concern." The state exercises a supervisory jurisdiction, not over individual local decisions, but over the content of local regulation of the use of lands so designated.

The ALI code specifies two classes of lands for which critical area designation is appropriate: (1) areas significantly affected by, or having an effect upon, existing or proposed major public facilities or other areas of major public investment and (2) areas containing or having a significant impact upon historical, natural, or environmental resources of regional or statewide importance.

Situations in the first class are development oriented. Critical area designation in these circumstances is intended to shape or influence major new development in areas of major public investment. Such designation would also protect greater-than-local interests when development is expected to have statewide or regional impacts. Types of major development might include major airports, shopping centers, power plants, surface transportation systems, water control projects, and central sewage treatment plants.

Applications of the critical area technique in the second class are protection-oriented. These designations provide for a state role when uncontrolled development threatens a sensitive environment in which there is a significant nonlocal interest. Such environments include coastal zones, wetlands, floodplains, shorelines, aquifer recharge areas, ecologically fragile lands, and habitats of endangered species.

The rationale for applying the critical area approach in both situations is not complicated. As recognized by the Council of State Governments (12), "the critical area concept provides a means of demonstrating that the significance of some areas or facilities clearly extends beyond the boundaries of the communities in which they happen to be located."

Although an increased state role draws some support because of the failures of lo-

cal government in land use management, the rationale behind the critical area concept is broader than this. As Mandelker (21) pointed out, "If major facilities are built with state (and often federal) funds, then there is a state interest in regulating development adjacent to these facilities in order to protect the state's investment." Furthermore, when major facilities produce spillover effects in adjacent local jurisdictions, the required cooperation between local governments justifies a larger decision-making unit. Beyond this, if specific land resources are threatened, critically interdependent, and/or are important to the entire state (such as floodplains, wetlands, or the coastal zone) then states have an interest in regulation of these resources.

Applying the concept to farmland

Although a farmland protection program fitting the critical area model has been proposed in California, the general adaptability of the critical area approach to farmland protection has not been studied systematically. Use of the critical area concept in farmland protection requires that the definition of the second land class in the ALI code be interpreted to include farmland "of regional or statewide importance"—important farmlands. This interpretation represents a logical extension of the critical area concept (12, 18). It essentially involves state (or joint state-local) designation of important farmlands; state-mandated, locally imposed restrictions on the use of these lands; and state review of local restrictions on the use of important farmlands.

There are, however, fundamental differences between important farmlands and other types of land typically placed in the second ALI code land class. Recognition of these differences is important in determining the potential use of the critical area approach for farmland protection.

First, important farmland must be distinguished from less important farmland. All farmland cannot fit under the "critical" umbrella, no matter how broadly interpreted, except perhaps in those states having only a small proportion of their total land classified as farmland.

Defining important farmlands is crucial for another reason. It is the mechanism for adjusting the scope of the critical area approach in regulating farmland conversion. The definition determines the magnitude of the land area to be protected, the breadth or specificity of the program's public purpose, and, therefore, the political acceptability of using the critical area

approach to limit farmland conversion. Because the use of large areas of privately owned land may be restricted, it is essential that the statewide definition have a broad base of support.

Second, the public purpose for protecting important farmland is less widely recognized and less easily established than for lands typically included in the second ALI code classification. The public purpose in limiting development in a floodplain, wetland, endangered species habitat, or coastal zone is obvious and widely supported. However, to the extent that marginal land can be substituted for important farmland, the case for protection of important farmland is not as self-evident, particularly when a large portion of the land base is designated as important farmland. For this reason, use of the critical area technique for regulating the conversion of important farmland to nonagricultural uses may require a greater level of public awareness and political commitment than might be necessary to protect other types of critical areas.

Third, a critical area program for important farmlands requires more administrative flexibility than do programs involving more traditional types of critical areas. Flexibility is needed because the relative scarcity of important farmlands is often not as great as for other types of critical areas, the degree of functional interdependence among parcels of agricultural land is not as great, and substitutes for important farmland in agricultural production (marginal farmland and such nonland inputs as fertilizer) are more plentiful. A critical area program for restricting the use of farmland, therefore, cannot be absolute. The need for flexibility means the program must have clear, specific criteria for determining when the protection of important farmland is in the public interest and when the conversion to nonfarm uses is warranted.

The California experience

British Columbia adopted a farmland protection program in 1973 that generally fits the critical area model (2, 26), but no such farmland protection program has been adopted anywhere in the United States. Programs in Hawaii and Oregon have some features in common with the critical area approach (22, 23).

A program of the critical area type was considered in California from 1974 to 1978. The California Assembly passed different versions of the program in 1976 (8) and 1978, but neither version passed the California Senate. Inasmuch as the Cali-

California Legislature has put forth considerable effort in debating, drafting, and revising farmland protection proposals fitting the critical area model, the California experience is worth examining.

The California proposal (called the Prime Agricultural Lands Act) would have provided for state-mandated, locally administered restrictions on the conversion of certain agricultural lands to nonagricultural uses. Specifically, the proposal would have (a) required local governments to prepare and adopt local "agricultural resources programs" to restrict the conversion of "prime" agricultural lands to nonagricultural uses except where prime lands have already been irrevocably committed to urban uses or are needed to provide for projected growth needs of a city (if it is unreasonable to use other than agricultural lands for such purposes), (b) established an Agricultural Resources Council to administer the land use management program at the state level, (c) authorized interim jurisdiction over all prime agricultural land by the council until local restrictions took effect, and (d) provided for property tax assessment of restricted land on the basis of its value in agricultural use.

The Agricultural Resources Council would have been composed of 11 members—three appointees representing counties, three appointees representing cities, three appointees representing the public, and the administrators of two state agencies. Its responsibilities would have included the adoption of guidelines to assist cities and counties in preparing their local agricultural resources programs, designation and mapping of prime agricultural lands, and review and certification of local agricultural resources programs.

The proposal would have required adoption of local agricultural resources programs by ordinance, but the programs could not have become effective until reviewed and certified by the council. The review authority of the council would have been limited, however. The council could not have exercised its independent judgment on the evidence. Local agricultural resources programs would have had to be evaluated on the extent to which they complied with guidelines established by the council.

Once a local program had been certified, a city or county could propose to alter or revise the program once a year. Proposals for revision would have had to be submitted to the council for certification in the same manner in which the local agricultural resources program was originally established.

As indicated, the scope of the proposed

program in California was limited to prime agricultural land. The proposal's definition of "prime" reflects an evolution in the thinking and experience of Californians concerning the concept of prime in the context of agricultural land protection. The state's current definition of "prime agricultural land," established by the California legislature when it enacted the California Land Conservation Act of 1965 (Williamson Act), includes farmland meeting any one of five criteria: (1) Class I or II soils in the Soil Conservation Service (SCS) classification scheme, (2) rates of 80 to 100 in the Storie index rating, (3) a carrying capacity of one animal unit per acre, (4) a gross revenue of \$200 per acre in unprocessed plant production in three out of the previous five years, or (5) land in fruit or nut-bearing trees, vines, or bushes that have less than a five-year nonbearing period and that normally return not less than \$200 per acre. This definition has not proved entirely satisfactory and may not be an adequate system for guiding difficult land development and preservation decisions (5, 6). It has several problems. One is that the SCS Class I and II ratings include about 3 million acres of high desert lands that are not now irrigated, nor are they ever likely to be. These lands are of minimal importance to California agriculture. In this case, water availability is of much greater significance than the physical quality of the land itself (5).

In some instances the definition is unstable, changing with commodity prices, yields, and agricultural technology. For example, when the definition was first established, only widely acknowledged high-value crops could meet the \$200 per acre per year criterion. Higher commodity prices in recent years, however, have created a situation in which land used for dryland hay production could be classed as prime in some years.

Finally, it has been argued that the current definition is inadequate because it excludes rangelands, the cornerstone of California's \$2 billion per year cattle industry (5).

The proposed Prime Agricultural Lands Preservation Act redefined prime agricultural land in California to include "prime farmland" and "unique farmland" as defined in the SCS Important Farmland Inventory (13) and "prime rangeland," which was defined in the legislative proposal. This definition accounts for about 12.1 of California's 33.4 million acres of farmland—an estimated 5.0 million acres of prime farmland, 0.7 million acres of unique farmlands producing specialty crops that require a unique combination of

soil quality, climate, location, and water supply; and 6.4 million acres of prime rangeland (5). The definition indicates the strong emphasis of this proposed program on commercial agriculture. Clearly, the majority of California's \$12 billion to \$13 billion in agricultural output a year is produced on the land covered by this definition.

If the legislative proposal had been adopted, it would have established an innovative land use management program for the 12.1 million acres of prime land in California. All conversions of prime farmland to nonagricultural uses would have been required to pass a public interest test involving considerations of more than local interest.

The program would not have applied, however, to the 30 million acres of privately owned, nonprime farm and forest land in California may have been viewed by some as a serious defect in the program's design. But there may be important advantages to a highly specialized program of this type. The political feasibility and constitutional validity of noncompensatory regulation of farmland conversion is unquestionably strengthened by limiting the program to those lands best suited to agricultural production.

It is difficult to assess the potential effectiveness of the California program proposal. Because all local governments would have been required to protect prime agricultural lands not specifically designated as available for development (either currently or as part of the 10-year growth plan of a city), a clear distinction would exist between prime agricultural lands that could be subdivided and those which could not. This designation probably would have reduced the conversion of prime agricultural lands to scattered large-lot residential development in the rural-urban fringe.

Beyond the rural-urban fringe, this designation may have also helped to reduce many destabilizing, nonagricultural influences—overoptimistic expectations about conversion of undeveloped land to nonagricultural uses, a high level of speculation in rural lands, parcellization, high rates of absentee landownership, shorter leases, and the like. Such forces undermine the long-run productivity of agricultural lands and cause more agricultural land to be idled than would otherwise be the case. An effective land protection program would send clear signals concerning future land use, thereby contributing to maintenance of the long-run productivity of prime agricultural lands in remote areas as well as the rural-urban fringe.

Although prospects for successfully mod-

erating the rate of conversion of prime farmland to nonfarm uses seemed good, the effectiveness of the California program would have been influenced by at least three additional factors. The impact of these factors could only have been assessed after the program's adoption by the legislature. The factors are as follows:

1. *Statewide guidelines.* The Agricultural Resources Council would have been responsible for adopting statewide guidelines to assist local governments in preparing state-mandated local agricultural resources programs. The guidelines would have specified (a) minimum parcel sizes appropriate for prime agricultural lands; (b) criteria, methods, and procedures for excluding prime agricultural lands from local agricultural resources programs (due to vested rights in or prior commitment to other uses, the availability of public services, etc.); and (c) criteria and methods for cities to use in projecting land needed for growth over the next 10 years. Because the statewide guidelines were to have been used to evaluate and certify local agricultural resources programs, their role would have been crucial in establishing bounds for local decision-making concerning prime agricultural lands.

2. *Local implementation.* Although statewide guidelines would have provided bounds for local decision-making, identifying prime lands for protection would have remained largely a local matter. Hence, the degree of protection actually obtained would have been influenced by the thoroughness of local planning and by local policies concerning growth, the density of new settlement patterns, and enforcement of local ordinances protecting prime agricultural lands.

3. *Effectiveness of restrictions on minimum parcel size.* The ability of local governments to prevent the conversion of prime lands designated to remain in agricultural use depends upon the effectiveness of the land use control mechanisms used. The primary means of retaining prime agricultural land under the California proposal would have been (a) restrictions on land divisions (minimum parcel size limitations); (b) prohibition of incompatible uses, for example, residential subdivision, commercial, and industrial uses; and (c) property tax assessment based on agricultural value. It therefore seemed likely that the program would succeed in retaining prime agricultural lands designated to remain in agricultural production.

However, one unknown factor still remained that might have undermined the effectiveness of the program—the level of demand for the minimum size parcel for

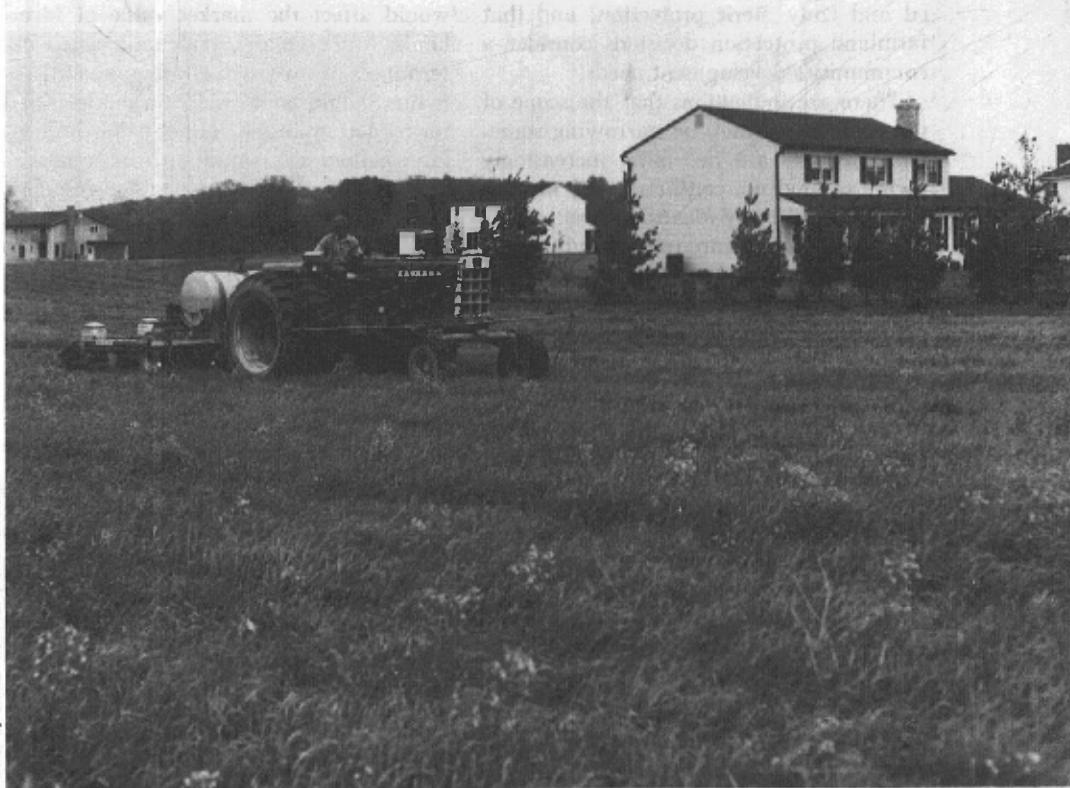


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Farmland protection policy should not preclude development, but rather lead to a deliberate public choice about what development occurs where.

rural residential (hobby farm) uses. Because local governments cannot regulate the intensity of agricultural use, nor would anyone suggest they should, it could be difficult to prevent the loss of these lands from commercial agriculture if a significant demand exists for rural residences on large parcels (in the 10- to 40-acre range) of prime agricultural land. The outcome would not have been completely dictated by market conditions, however. Both the state, through guidelines on minimum parcel sizes, and local governments, through local ordinances, would have had considerable flexibility in determining minimum parcel size standards. But the selection of minimum parcel size standards would not have been easy. Smaller minimum parcel size standards are more feasible politically, but larger minimum parcel sizes may be more effective in protecting farmland. Thus, tradeoffs between political feasibility and program effectiveness could have made these choices especially difficult.

California's Legislature has given no serious consideration to any new proposal for controlling farmland conversion since 1978. Some speculate that this is a result of the adoption of Proposition 13, an initiative limiting the property tax rate to one percent of market value throughout California. Most of the much-needed support from the agricultural community for farm-

land protection programs may have been based on provisions requiring assessment of restricted farmlands on the basis of agricultural value. If so, the implementation of Proposition 13, which substantially reduced the property tax burden on all real estate in the state, including farmland, weakened the base of support of these proposals in the agricultural sector.

Prospects and problems

Farmland protection remains a controversial issue in many circles. Part of the controversy may be semantic. Too often the term "farmland preservation" is used. Hence, many people assume that development and farmland protection are mutually exclusive.

Obviously, they need not be. The purpose of farmland protection policy is not to prevent development indiscriminantly. Nor is it intended to impose an inflexible, permanent freeze on all agricultural land conversions. Its objective is to assure that the conversion of agricultural land to developed uses is by deliberate public choice rather than default.

Flexibility and fairness are essential in farmland protection policy. The political and legal durability of such programs also requires assurances that farmland protection involves lands that are carefully select-

ed and truly merit protection, and that farmland protection decisions consider a community's development needs.

There are indications that the scope of the controversy may be narrowing somewhat. People are becoming increasingly aware of land use conflicts. They are less enamored with the idea that land ownership provides an unrestricted right to do what an owner pleases with land, regardless of the impact on society. They also recognize more and more that every developed acre carries with it an implicit commitment of future public expenditures. In the suburban-to-rural spatial continuum, there is probably some outer limit beyond which most would agree that parcellization into units too small to sustain commercial agriculture is too costly to society and should be limited. Just where this is, however, creates disagreement among even reasonable people, not only over the limit's location, but over the procedure (by whom and with what criteria) used to determine it as well. Choice of land use management techniques is thus crucial in the policy-making process.

The critical area approach to regulation of farmland conversions probably will receive increased attention from those concerned with the impact of urban and suburban growth on the rural landscape and the economic viability of agriculture in rural-urban fringe areas of the United States. The approach has several strengths: First, it is a straightforward method of influencing the rate, timing, and spatial distribution of farmland conversions. Second, it can provide for an element of state influence in rural land use management that does not significantly erode local government authority. While the approach definitely takes away the local option of doing nothing, a substantial amount of local flexibility can be left intact (12, 21). Third, it will stimulate in-filling (development of undeveloped land in developed areas) and the substitution (in development) of marginal agricultural lands for prime agricultural lands. Fourth, its economic feasibility is not impaired by the burden of excessive compensation on the public purse. And fifth, if limited to highly productive farmland, the political feasibility and constitutional legitimacy of the approach can be enhanced by thoroughly documenting the public purpose to be served and carefully specifying the conditions under which conversion is consistent with the public interest.

Unfortunately, little is known about one key factor of the program that may weigh heavily in assessing the program's effectiveness: The extent to which the approach

would affect the market value of farmlands? And even after these impacts are determined, a larger question may still remain: Should landowners be compensated for reductions in the market value of farmland caused by regulation? Inasmuch as local governments have long had responsibility for managing land development in rural as well as urban areas and because the performance of local government has been inadequate, this may be akin to asking if landowners have a vested right in continued local land mismanagement or nonmanagement? Or stated another way, do landowners have a property right in permanent regulation?

To the extent that private investment behavior has been conditioned by the instability of rural zoning in the past, this is not an easy question to answer. But if landowners are left with profitable land use options, if state review of local decisions affecting farmland conversions is used to achieve a widely supported public purpose, and if the imposition of conversion regulations can be interpreted as enforcement of old rules rather than a change in rules, then the argument for compensation may not be overwhelming. Ultimately, this question will be resolved in the political arena.

The critical area framework is not without possible weaknesses or limitations. One is that the approach is based on single-resource planning and regulation. It is not comprehensive. Those arguing the point will emphasize the need for programs that give equal consideration to agriculture, housing, transportation, recreation, commerce, and industry. It may be especially difficult to design single-resource programs that adequately reflect parallel concerns for both conservation and development. A program focusing exclusively on the protection of farmland of statewide importance, for example, may result in increased speculation and land use uncertainty on other agricultural lands.

It may well be the case, however, that complex multipurpose programs, by the very fact of their comprehensiveness, will encounter substantial political resistance. Highly specific single-resource programs, on the other hand, may be more feasible politically. Progress in achieving farmland protection objectives thus may entail a trade-off of program comprehensiveness for political expediency.

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