job training, but many were experienced farmers. In 1984, the Interim Community Development Association set up the Indochinese Farmers Cooperative on a piece of county-owned farmland in the suburb of Woodenville. The cooperative provided several families with land and training to become market gardeners.

The Indochinese farmers are now an established presence at Pike Place Market and the neighborhood farmers' market near the University of Washington. A few families have moved from the project's land in Woodenville to lease their own land in the county. One family has purchased property, and several others continue to farm on county land in Woodenville. Interim Community Development Association staff person Leslie Morishita reports that there has been "an explosion of interest in farming in the Indochinese community" in the past few years. She estimates that there are now 40 Indochinese families trying to make a living from market gardening in the county. The scarcity of affordable land for lease or sale is a major barrier to these entrepreneurs becoming independent. Morishita and other people who work in the community encourage the refugee farmers to contact the county about the availability of land enrolled in the Farmland Preservation Program<sup>16</sup>.

County. CSA farmers sell shares of their harvest to subscribers at the beginning of the year. The subscribers receive weekly shares of produce and animal products throughout the growing season. The concept is popular because it reduces risk for farmers—they get paid at the beginning of the year, regardless of the weather—and consumers receive high-quality farm products at a reasonable cost.

King County Agriculture Commission member Bob Gregson and his wife Bonnie have a small CSA farm on Vashon Island in Puget Sound. Island Meadow Farm is small even by metropolitan farm standards—the Gregsons cultivate less than two acres—but it nets more than \$30,000 per year and provides most of the couple's income. The Gregsons raise chickens for eggs and meat and grow a variety of vegetables, fruits and nuts. Approximately one-third of their products are marketed to subscribers; the rest are sold through a farmstand, the Vashon farmers' market or wholesale to customers on the island<sup>17</sup>.

The Gregsons believe that their small, intensive operative represents the future of farming in King County. "We're reinventing something here," Bob says. "We're not going to be rebuilding the farming institution as it was. We have to find something new that works." "The big question," adds Bonnie, "is how you can make farming economic on the urban fringe. We think we've found a solution here. We make a better living here than most people do on 400- or 500-acre farms<sup>18</sup>." The Gregsons always have a waiting list for subscriptions, and they published a booklet in response to the requests they received for information on how to start a similar operation<sup>19</sup>.

CSA farms may be especially compatible with urban development. Farmer Martha Goodlet rents two acres of land for her CSA farm from a retired dairy farmer who sold an easement to the county in the 1980s. One of Goodlet's subscribers is the developer of a residential community on the ridge above the farm. In 1996, he purchased 14 shares of the farm's harvest to distribute to homeowners as an amenity. Eventually, he hopes that they will buy their own shares. Martha likes the concept, because it gives her the opportunity to educate suburban homeowners about agriculture and the needs of farmers<sup>20</sup>.

There is even evidence that community supported agriculture can help protect farmland. The fate of a CSA farm in King County's Sammamish River Valley was in doubt when the owner of the property, who had been leasing it to a farmer, announced his intention to sell the land. The shareholders contributed money and worked with a land trust to help the farmer purchase the land.

#### LESSONS AND PROSPECTS FOR THE FUTURE

LeRoy Jones, who managed the King County Farmland Preservation Program during the 1980s, gets tired of hearing from the program's critics. "People criticize [the FPP] because it hasn't preserved the activity of farming," Jones explains, "but the purpose of the program was to preserve the soil—and it's still there. Now what we need to do is to make agriculture the most attractive use of the land."

Jones emphasizes the successes of the FPP. The program prevented the construction of large-scale residential developments on more than 12,000 acres of agricultural land. Most of the protected properties are still being used for some form of farming. But recent residential and commercial construction around some of this land has caused erosion and flooding that may make farming impossible. Development pressure continues to be a serious challenge to King County farmers. The 1996 Farm and Forest Report recommended a comprehensive, incentive-based approach to supporting agriculture and protecting farmland. The future of agriculture in the county may depend on the extent to which these recommendations are implemented.

The history of the King County PACE program illustrates the need for communities to take a strategic and comprehensive approach to farmland protection. Simply protecting land from development will not ensure the continuation of agriculture if market or regulatory pressures are driving farmers out. In high-priced land markets near cities, wealthy urban residents who want to purchase property for estates may outbid farmers for land that has been protected by PACE. This is especially true if farming is not profitable and if farmers believe that development is inevitable. Local government officials must recognize that farms are affected by surrounding land uses. Protected land must be buffered from residential and commercial land uses if it is to remain viable for agriculture. Finally, farmland protection requires a long-term commitment. Lands protected by PACE must be monitored, and easements enforced, if the land is to remain available for agriculture. Governments must be willing to adapt farmland protection strategies to respond to changes in economic conditions.

# INTRODUCTION

Thurston County hugs the southern edge of Puget Sound and is bisected by Interstate 5, the region's major north-south highway. Its largest city is the state capitol, Olympia. Easy access to the ocean and mountains and the availability of affordable land within commuting distance to Seattle have created a strong market for homes in Thurston County. Population grew by nearly 30 percent during the 1980s, making Thurston the third-fastest-growing county in the region.

FARMLAND PROTECTION

IN THURSTON COUNTY

Land in farms in Thurston County declined steadily between 1950 and 1974, then leveled off. According to the 1992 Census of Agriculture, Thurston County has approximately 60,000 acres of land in farms, accounting for approximately 12.5 percent of its land base. Major crops and commodities produced in the county include hay and beef. Vegetable and fruit cultivation is increasing, as is the number of nursery operations.

# TECHNIQUES AND STRATEGIES

## 1976 Comprehensive Plan

Thurston County's 1976 Comprehensive Plan recognized the loss of farmland as an important issue, and recommended evaluation of PACE and TDR as strategies to address the problem. In 1978, the county formed a committee, composed primarily of farmers, to advise the county commissioners on agricultural issues. In 1980, the county adopted a voluntary agricultural zone, but no landowners were interested in signing up for the program.

## Urban growth boundaries

Thurston County planners worked with local officials in the jurisdiction's three largest cities to designate urban growth boundaries during the early 1980s. The cities of Olympia, Lacey and Tumwater signed a memorandum of understanding with the county implementing UGBs in 1983. UGBs were incorporated into city comprehensive plans in the late 1980s. The County Comprehensive Plan was revised between 1984 and 1988. As part of the revision process, county staff attempted to identify lands to be protected for long-term agricultural and forestry use, but farmers and foresters were suspicious of the county's intentions and opposed its efforts. GMA required all of Thurston County's cities and towns to adopt UGBs. In 1995, the county worked with municipal governments to revise or adopt new UGBs.

#### **Emergency zoning**

Between 1980 and 1990, Thurston County's population increased by almost 40,000 new residents. New housing construction increased by more than 31 percent. In 1989, alarmed by rapid growth, the county commissioners passed an "emergency downzone" in a region known as the Nisqually Valley. The Nisqually is a broad, flat valley located in the county's northeastern corner. The valley also encompasses a wildlife refuge. While the Nisqually is essentially undeveloped, it is divided by I-5 and adjacent to high-growth areas. During the growth boom of the 1980s, the county was concerned that without immediate action, the valley's scenic and agricultural values would be lost to development. The commissioners' action changed the zoning from one or two dwelling units per acre to one unit per five acres. The downzoning was opposed by landowners.

In 1990, the state Growth Management Act changed the climate for planning in the county. The Act required the county to designate agricultural lands of long-term commercial significance. With this mandate, the county immediately downzoned remaining rural and agricultural areas in its jurisdiction from one unit per one acre to one per five acres as a "holding measure," to slow down conversion and allow for planning. Farmers, realizing that changes in zoning were inevitable under GMA, worked with the county to designate agricultural lands.

In 1991, the county began to investigate the feasibility of a PACE program to protect farmland and compensate agricultural landowners for lost equity. An initial estimate put the cost of protecting 13,000 acres of agricultural land at approximately \$26 million. A second estimate cut the cost to \$11 million, but this sum still exceeded the amount that the county believed the public would support. Ultimately, the county decided to limit use of PACE to the Nisqually Valley, which was viewed as the top priority for protection.

# Developing a PACE program for the Nisqually Valley

In 1992, Thurston County adopted the Nisqually Sub-Area Plan, which created the Nisqually Agricultural Zone. The zone encompassed approximately 1,100 acres. Zoning was changed from the 1989 "emergency" density of one unit per 5 acres to one unit per 40 acres, although landowners could still develop at one per 5 if the new units were clustered. Thurston County Senior Planner Steven Morrison describes a "gentlemen's agreement" between the county and the Nisqually landowners: The landowners would accept the tough new zoning, with the understanding that the county would develop a PACE program<sup>21</sup>.

Nisqually landowner and part-time farmer Jim Myers remembers the process as being far more rancorous. When the county downzoned land in the valley, Myers formed a group called FARM—short for Farmers Against Regulatory Mischief. At first, he was not very enthusiastic about the idea of PACE. "They offered us a nickel or a gun," he relates, explaining that the landowners opposed the downzoning-for-PACE agreement, but felt they had no recourse. Myers was also cynical about the county's motivation for designating the Nisqually as an area of long-term agricultural significance. "It had nothing to do with peas and beans," he insists. "The whole impetus for saving the valley is cosmetic. Period. You go down the freeway and see this beautiful green valley with a wildlife refuge. Don't let anyone tell you it has to do with peas and beans<sup>22</sup>."

Despite his mistrust of the county's motives, Jim Myers worked with other Nisqually landowners and the county to develop a PACE program that would be acceptable to farmers. He held meetings in farmers' kitchens and organized public hearings to present the county's proposed PACE program to local residents. He invited the manager of King County's Farmland Preservation Program to speak to the landowners. At the end of the process in 1996, Myers was confident that the PACE proposal reflected the extensive communication between Nisqually farmers and the county<sup>23</sup>.

In 1995 there were only 19 homes on the 1,081 acres in the Nisqually Agricultural District. According to planner Steven Morrison, the county's goal in designing a PACE program for the Nisqually was "to keep the valley exactly as it is today." If it is economically and politically achievable, the county wants to purchase all remaining development rights in the valley.

Thurston County was fortunate in that it had a source of expertise on PACE right next door. County planners studied the King County program carefully, with an eye towards duplicating the program's successes and avoiding its failures. They derived five important lessons from King County's experience:

- · Avoid delays in getting the program started by choosing a funding technique that can be quickly implemented;
- · Allow enough time to purchase the number of properties desired, and accelerate acquisition by encouraging offers at the beginning of the program and streamlining the application and response process;
- · Be realistic in estimates of program costs and the number of easements it will be possible to acquire to avoid public misunderstandings;
- · Provide for two appraisals, to include both the agricultural and market values of properties, instead of having different appraisals for the two values (the latter practice was perceived to have increased the cost of easements in King County);
- Discourage the resale of preserved properties for estate use by avoiding offers which reserve a future residence on parcels smaller than 40 acres<sup>24</sup>.

County planners made a decision early in the process of developing a PACE program to allow landowners to sell one development right per five acres, even though they could only develop at the rate of one unit per 40 acres. Landowners received one development right for every parcel larger than 2.5 acres. This made the program more attractive. To determine the potential cost of purchasing easements at this rate, the county commissioned an appraisal from a Seattle real estate appraisal firm. The firm calculated the difference between fair market value and agricultural value of land in the Nisqually, taking into account that small parcels are worth more per acre than large parcels, and the existence of many "physically challenged parcels" where development potential would be limited due to wetlands or location in the flood plain. The pilot appraisal, completed in November 1995, estimated the cost of purchasing easements on all of the developable land in the Nisqually Agricultural District at \$2.5 million, an average of approximately \$2,500 per acre<sup>25</sup>.

The King County FPP relied on a voter-approved bond issue, which took three tries to pass. The ballot measure limited the interest rates the county was permitted to pay on the bonds, and the high interest rates of the early 1980s delayed implementation of the program. Thurston County was determined to avoid these problems. The funding source for the Nisqually program is the Conservation Futures Levy. Conservation Futures is an optional local tax of up to \$.065 per \$1,000 of assessed value, which may to be used to acquire land and related interests for conservation purposes. Thurston County began collecting the tax in 1991 to acquire land for parks; funding is now divided between parks and the PACE program.

Thurston County commissioners approved the Nisqually PACE program in 1996. It offers landowners just one opportunity to sell easements. From the time that the program was implemented, landowners had 30 days to apply. The owners of 19 out of the 20 properties in the valley submitted applications in early 1997. The county will make offers to the landowners within six months, and the landowners will have six months to decide whether to accept the offers<sup>26</sup>.

# TDR: Taking advantage of regional planning

In 1993, a year after establishing the Nisqually Agriculture Zone, Thurston County created the Long-Term Agriculture Zone. This zone was applied to approximately 11,000 acres of land dispersed throughout the county. Density for the new zone was decreased from one house per 5 acres to one per 20, with a requirement that non-farm residences be clustered on no more than 15 percent of a parcel. When the county decided that it could not afford a PACE program for this zone, it began to explore the possibility of using TDR.

The Thurston Regional Planning Council played a central role in the development of the county's TDR program. TRPC is an intergovernmental board made up of representatives from all the local jurisdictions in the county, including the county governments. Its mission is to provide visionary leadership on regional plans, policies and issues. TRPC has its own staff and provides planning services to the county and its seven incorporated jurisdictions. A key function of TRPC is to build intergovernmental and community consensus on issues that affect the entire county. This role was crucial to the development of TDR, because the land targeted for protection was located in unincorporated areas of the county. Planners believed that development rights should be transferred to districts within urban growth boundaries.

The first step in TRPC's effort to develop a TDR program was getting buy-in from all the jurisdictions. Staff prepared a background paper on TDR to explain the concept. TRPC then hired a Maryland consulting firm to conduct a feasibility study of TDR for the county. The consultants had experience working in Montgomery County, Md., and were familiar with that jurisdiction's successful TDR program.

The study was completed in May 1994. It reviewed the concept of TDR, TDR's financial and legal aspects and the experience of jurisdictions that have used the technique. It analyzed the climate for TDR in Thurston County, including trends in population and housing, and proposed a wide range of options for how to structure a TDR program and allocate development rights. Finally, the study presented a thorough financial assessment of the market conditions for TDR. The financial analysis included a calculation of the value of development rights in several different county locations, based on the premise that landowners in the agricultural zones were entitled to one development right per 5 acres<sup>27</sup>.

The study concluded that the county had the necessary conditions for successful implementation of TDR. It determined that there was land within the urban growth boundaries of the cities sufficient to absorb all of the development rights from the agricultural areas. The authors believed that the estimated value of development rights was high enough to sustain transfers that would satisfy both buyers and sellers. The study warned, however, that implementing TDR would take time, resources and a sustained commitment to "incorporate the self-interest of program participants in the design and structure of a program." It continued:

Devising a practical TDR program will involve far more than simply adopting a TDR ordinance. TDR breaks new ground for developers, bankers, attorneys, landowners, and planners. The County must be willing to develop not only a functional program, but will need to educate and be educated by prospective participants. A continuing positive working relationship with the cities in Thurston

County will also be critical for the successful designation of prospective receiving areas in cities. A County TDR program will also require patience. Should the County elect to establish a program, it may take several years for there to be any significant market activity or actual transfers<sup>28</sup>.

When the idea of TDR was first proposed, many farmers were suspicious of it. They objected to the changes in minimum lot size in the agricultural zones and were skeptical about TDR helping them recover their equity. When TRPC's staff members read the conclusions of the TDR feasibility study, they were concerned that it might not be the right time to implement TDR. Senior Planner Shanna Stevenson proposed putting program development on hold. She was surprised when the farmers on the county Agricultural Advisory Committee stepped in to defend TDR, and offered to promote the concept to "stakeholder groups" including other farmers, the building community and bankers<sup>29</sup>.

Support from the Agricultural Advisory Committee encouraged TRPC to go ahead with TDR, and staff developed a TDR sending ordinance for the county. Landowners would be entitled to one development right for every 5 acres of land they owned, regardless of whether the land was actually suitable for development. They would be permitted to develop property at the density of one unit per 20 acres, but would be required to reserve one development right for each house they wanted to build. Development rights would be traded on the open market and could be used in any designated receiving area of the county. The sending ordinance was adopted by the county commissioners in November 1995.

Council staff also developed a model TDR receiving ordinance for incorporated areas. According to planner Stevenson, there was an agreement from the outset of the program that the cities would provide sufficient density in their receiving areas to accommodate all the development rights in the sending areas. Stevenson reflects that the mid-1990s were an opportune time to reserve density for development rights in the county's urban areas, because the jurisdictions were in the middle of the planning process required by the GMA. The model ordinance was distributed to each of the individual jurisdictions in the county in 1995, and council staff worked with the cities to customize it to their own goals and needs.

The conventional approach to TDR is to require the use of development rights to increase density. This was the concept used by the model receiving ordinance, and the cities of Lacey and Tumwater adopted the approach. The city of Olympia, however, chose a new and innovative strategy. With strong demand for low-density urban residences, city officials wanted to encourage compact development to prevent sprawl and facilitate public transportation. They reasoned that under current market conditions, developers might not be willing to buy development rights to build at higher densities. They might, however, be willing to pay a premium to build at *lower* densities. As a result, densities in Olympia's receiving areas range from four to eight units per acre. Under the new TDR receiving ordinance, developers can build five to seven units per acre by right, but must purchase development rights to build at the lowest and highest permissible densities. In theory, the demand for large houses on quarter-acre lots will merit the cost of purchasing development rights. City officials believe that the receiving ordinance creates a win-win situation: If development rights are purchased, farmland in the county is being protected; if they are not used, then the city will have effectively discouraged sprawl within its borders.

To promote TDR to the county's farmers, Thurston County Associate Planner Jacqueline Kettman developed a TDR information kit. The kit includes sample application forms for development rights and explains the process of selling them. It addresses farmers' concerns about how selling development rights would affect the uses and value of their property and provides a list of resources.

As of early 1997, no development rights had been transferred, but the county reports that it has received inquiries from both farmers and developers. There are other signs that the program may be successful. Senior Planner Steven Morrison notes with pride that members of the Agricultural Advisory Committee have taken ownership of the TDR program and now defend the agricultural zoning they once opposed.

Bruce Briggs, owner of Briggs' Nursery and a member of the Agricultural Advisory Committee for 15 years, sees the TDR and PACE programs as an investment in the future. He doesn't believe that TDR will be used much in the next decade, but emphasizes that "land preservation needs to start before everything gets built up<sup>30</sup>."

# Agricultural marketing

Like many farmers, Jim Myers insists that keeping farming profitable is the most important farmland protection strategy. Municipal governments in Thurston County are developing strategies to increase farm viability. The city of Olympia recently built a new, covered structure for its farmers' market, and the number of organic and CSA farms that use the market is growing. To increase public awareness of agriculture, several jurisdictions funded a map of farms that sell products directly to the public. The Farm Bureau has produced road signs that call attention to the county's agricultural areas.

## LESSONS AND PROSPECTS FOR THE FUTURE

The history of PACE and TDR in Thurston County demonstrates the sustained commitment necessary to develop a comprehensive farmland protection program. It took 20 years from the recommendation to pursue PACE and TDR to the time when the programs were approved. This period included seven years of intensive planning, public outreach and program development between 1989 and 1996. The Thurston County farmland protection program also illustrates the advantages of a regional approach. The Thurston Regional Planning Council's good relationship with all of the local jurisdictions was a key factor in developing the program.

Will zoning, PACE and TDR be sufficient to protect farmland and sustain agriculture in Thurston County? The planners are optimistic, but nurseryman Bruce Briggs sounds a cautionary note: "Preserving the ground is fine," he comments, "but ground doesn't have much value if you don't have water." While farmland protection has been an important issue in the 1980s and 1990s, Briggs predicts that a shortage of water for irrigation, even in wet western Washington, will be an even more important issue in the future<sup>31</sup>.



#### INTRODUCTION

FARMLAND PROTECTION

IN WALLA WALLA

COUNTY

Walla Walla County is located in southeastern Washington. The county is bordered by Oregon to the South, and the Snake River to the west. The 600,000 acres of cultivated farmland constitute more than 73 percent of the county's land base. The value of agricultural production in Walla Walla is approximately \$197 million. Major crops include wheat, barley, alfalfa, sweet corn, fruit and vegetables. The county ranks first statewide in production of alfalfa seed, second in green peas, third in wheat and seventh in total value of agricultural production. The majority of agriculture is dryland, but irrigated land produces good yields of high-value crops including alfalfa seed, apples, asparagus and sweet onions.

Walla Walla's agricultural economy is dynamic. Although its food processing industry is in decline, other sectors are growing. Broetje Orchards has grown from an experimental planting of trees to a major producer. According to Washington State University Cooperative Extension Agent Walt Gary, Broetje located in Walla Walla because of an abundance of inexpensive land. The orchard's owners built an entire town for migrant workers, who now live in the county year-round. Grape cultivation is also expanding. Since 1978, 10 wineries have opened in the county and Walla Walla is home to one of the world's largest growers of Concord grapes for juice. In recent years, farmers have begun to grow garbanzo beans and canola for oil, and the cultivation of hybrid poplar trees for pulp is increasing<sup>32</sup>.

The city of Walla Walla is the county seat and its residential, commercial and cultural center. There are three colleges in the city. Other population centers in the county include the town of College Place and the small farming community of Touchet. Since 1990, the county has been experiencing strong residential growth. Many of the new residents are young families looking for a safe community in an attractive location with good schools. The success of agriculture in Walla Walla may also be generating demand for new housing, as migrant workers settle permanently in the county.

#### **TECHNIQUES AND STRATEGIES**

#### Development pressure and the Growth Management Act

Long-time residents of Walla Walla tell a familiar story about the impact of development on the county's farmers. Third-generation farmer Craig Christensen spends a lot of time on the phone, fielding calls from developers who want to buy his land and neighbors who complain about the dust from his fields. Craig's father recently quit farming and put his land up for sale because he couldn't keep up with changing technology and new regulations. Craig has changed his practices to minimize dust, chemical use and the need to burn fields, but he's still getting complaints. If the wind shifts when he's burning a field, Christensen now expects to get calls from neighbors threatening a lawsuit. "We're going to a hotel and sending you the bill," they tell the exasperated farmer.

Christensen supported Washington's Growth Management Act as a tool to help limit development of productive farmland. He was on the county committee that designated agricultural lands of primary significance. "My main thing was to control the growth," he explains. "We looked at a soil profile for the county, and the city was built on the best farmland. I hate

to see the leapfrog effect." Growth, he insists, is "something we'll fight for a long time." If it is allowed to run rampant, "people will build here, there and everywhere, and that creates water problems. The law says that if you have the right to build a house you can punch a hole and get water. We used to have two ponds and a creek fed by springs. They're gone. The springs have dried up with the development<sup>33</sup>."

Growth management and land use issues are a controversial topic in the county. "I could fill a room with 50 farmers to talk about urban pressure," contends Washington State University Cooperative Extension Agent Walt Gary. "Twenty-five would say one thing, and 25 would say the opposite." The actions of the county commissioners reflect this divided sentiment. Between 1990 and 1996, the three commissioners, two of whom are farmers, voted to change the minimum lot size in one area of the county from 20 to 120 acres, imposed (and then removed) a ban on subdivisions on agricultural land and passed a right-to-farm ordinance. They also voted to allow a planned unit development in a remote agricultural area, and passed an ordinance upholding the property rights of the county's residents against actions by state and federal government agencies.

# Agricultural protection zoning in Russell Creek

Russell Creek runs through the southeast corner of Walla Walla County, adjacent to the Oregon border. The area is just five miles from town and has scenic views of the Blue Mountains. The community is exactly the type of place that attracts newcomers looking to escape city living. The families who farm in Russell Creek, however, do not want their land to be developed. Jeanne Brewer and her husband Harold grow wheat, garbanzos, peas, barley and canola on approximately 2,500 acres in Russell Creek. Harold is past president of the state wheat growers' association. Some of the land he farms has been in his family since his ancestors homesteaded the property. In 1990, the Brewers started a movement to implement tough new zoning in the area.

Harold's grandfather, John "Brownie" Mansfield, now in his 80s, remembers fighting development of Russell Creek farmland in the 1960s. He and his neighbors did not want a housing development in the middle of their farms. So Mansfield and the other farmers hired a lawyer (who also happened to be a farmer) to campaign for stricter zoning in the area. Their efforts were successful. The Agricultural Open Space District was created, and the zoning was set at one unit per 20 acres, which was the lowest density in the county<sup>34</sup>.

Twenty-acre zoning worked to keep residential development out of Russell Creek for 25 years. But in the early 1990s, Harold, Jeanne and Brownie started to get concerned about new construction. Mill Creek, just over the hill from the Brewers, had 10-acre zoning, and Harold and Jeanne watched in dismay as houses replaced the farms. Changing the zoning had worked to protect farms in the past, so the Brewers and their neighbors decided to try it again.

A group of Russell Creek farmers circulated a petition to neighbors asking that the density in the Agricultural Open Space District be decreased from one house per 20 acres to one per 120 acres. Fifty-six property owners signed the petition, which was delivered to the county Planning Commission. The Planning Commission and county commissioners recommended that Russell Creek be studied as part of the county's Growth Management Act

planning process. A local citizen's committee was appointed to investigate the issues and make suggestions.

The newly created Russell Creek Planning Area Committee included four farmers and a Walla Walla County Planning Committee member. They examined detailed maps of the area and studied existing comprehensive plan policies on agricultural land. They noted that the committee assigned to designate important natural resource lands as part of the GMA planning process recommended downzoning in Russell Creek. In 1991, the committee surveyed local residents about their opinions on zoning.

The survey results revealed mixed feelings among Russell Creek residents. Fifty percent of respondents were in favor of increasing the minimum lot size to 120 acres. This group owned about half of the total land in the district. Thirty-eight percent were farm owner-operators with average land holdings of 240 acres. An additional 6 percent of respondents were in favor of increasing the minimum lot size to less than 120 acres. Comments from residents in favor of increasing the minimum lot size emphasized the fertility of the Russell Creek area, the land's ability to produce high yields without irrigation and the difficulty of farming near non-farming neighbors<sup>35</sup>.

Twenty-eight percent of respondents wanted to keep the zoning at 20 acres, and 15 percent wanted to see a decrease in the minimum lot size. These residents felt that the proposed downzoning would interfere with their property rights and limit their options<sup>36</sup>.

Members of the Russell Creek committee analyzed the survey responses and petitions, and considered the impact of the proposed zoning change on residents who did not respond to the survey. They found that a majority of landowners in the area supported, did not object or would not be affected by increasing the minimum lot size to 120 acres. The committee members noted that adjacent land in Umatilla County, Ore., was zoned at one house per 160 acres, and that requests for variances and rezonings in Russell Creek had historically been denied. The projected cost of extending urban services and building new roads for the area was high. Based on these findings, the Committee recommended 5-1 to increase the zoning of the area to 120 acres, and made provisions to delete the properties of a few objecting residents who owned land on the edge of the proposed new zone.

The Walla Walla Planning Commission voted 5-3 to adopt the Russell Creek Committee's recommendation, and the County Commissioners voted 2-1 to uphold the Planning Commission's vote.

Jeanne Brewer believes that maintaining the zoning at 120 acres will be enough to protect the land in Russell Creek. The challenge will be preventing changes in the zoning and limiting development in other important farming areas in the County. The Brewers and their farming neighbors are very vigilant about attempts to develop land in Russell Creek or prime land in other parts of the county. They have spoken out against permitting variances to allow smaller lot sizes in their district. In 1996, Jeanne and Harold signed on to a lawsuit filed by farmers in the isolated agricultural community of Touchet against a proposed planned unit development. Touchet is more than 30 miles from the Brewer's farm. When asked why she is concerned about development on the other end of the county, Jeanne shakes her head. "It sets

a precedent," she warns, "that could undo all the work we've done." If the plaintiffs win the lawsuit, she explains, it will send a clear message to developers and county officials that subdivisions don't belong in the middle of prime farmland.

## Farmland protection by lawsuit: Fighting a subdivision in Touchet

In 1992, Walla Walla County Commissioners imposed a one-year ban on subdivisions on agricultural land. The ban was lifted in 1993. Since then, there have been two subdivision proposals for the rural areas. The first was withdrawn after strong objections from nearby farmers.

The second proposal, for a 32-lot planned unit development in the small farming community of Touchet in the eastern section of the county, has generated intense controversy. Alfalfa seed is the primary crop grown around Touchet. The land is irrigated, and production of alfalfa seed requires the use of highly toxic pesticides. The crop is pollinated by unique species of bees, which are raised in the fields by farmers. There are few paved roads in the area, and virtually all of the land outside the small settlement is in agriculture.

When the planning committee held hearings on the proposal, most of the farmers in the area voiced their objections to the development. They emphasized that alfalfa seed cultivation is especially incompatible with non-agricultural land uses, and that the proposed development would be contrary to the county's planning policies. The roads to and from the proposed site, they argued, were not designed to handle regular traffic, and water supplies were inadequate to serve such a large development. The nine-member planning committee agreed with the farmers, and voted unanimously to deny the proposal. The county commissioners, however, ignored the planning committee's recommendation, and approved the project by a 2-1 vote.

County Commissioner David Carey, a wheat grower and lifetime resident of Walla Walla, was the dissenting vote on the proposal. Carey is known as a leader in the local property rights movement, and he initially supported the PUD when he saw the project described on paper. But when he went out to look at the site, he changed his mind. "A PUD is supposed to address water, roads and sewer," Carey explains. "But none of that was addressed, and they weren't planning to address it." The commissioner is a strong supporter of Washington's GMA, and felt that the PUD would violate the intent of the law. "It ran contrary to everything we've been trying to do to this point," he reflects. "It just didn't make sense<sup>37</sup>."

Walla Walla 2020, an environmental and historical preservation organization, encouraged local farmers to file a lawsuit against the development. The suggestion was met with skepticism. Touchet is a small, tight-knit community where maintaining good relationships with neighbors is important. But farmers were also afraid of the potential impact of the development. Touchet resident Russ Byerly didn't want 30 neighbors across the road from his farm. He was concerned that 30 new wells could affect his water supply. He wanted to uphold the county plan and protect the viability of his operation. Byerly and all but one of the farmers with land adjoining the proposed development signed on to the suit<sup>38</sup>.

The lawsuit charged that the development was not in compliance with the county's comprehensive plan and subdivision ordinance, nor with the county plan for resource lands

developed under the GMA. The Washington State Superior Court overturned the county commissioners' action on the grounds that they did not have a record to back up their finding that the planned unit development was consistent with the county comprehensive plan. The commissioners appealed, and the case was scheduled to be heard by the Washington Court of Appeals in 1997.

# Right-to-Farm Ordinance

The Walla Walla County Resource Lands Technical Advisory Committee recommended that the county adopt a right-to-farm ordinance to further the goals of the GMA. In 1995, Walla Walla county commissioners implemented the committee's recommendation. The ordinance protects farmers from nuisance complaints as long as they conform to generally accepted agricultural practices. The ordinance also offers nuisance protection to farms based on changes in land use nearby, and requires a notice in the deed of new residential properties located within one-quarter mile of land zoned for agriculture.

#### Ordinance 219

In 1993, Walla Walla County Commissioners approved "An Ordinance for the Purpose of Coordinating County, Federal and State Government Actions Affecting Land and Natural Resources in Walla Walla County." The statute, commonly known as Ordinance 219, was sponsored by local property rights activists. It directs the federal and state governments to consult with local officials on any proposed actions that affect land use and natural resources in the county; to involve the county in planning, research, hearings and environmental impact assessments; to submit a list of alternatives to any actions that might conflict with county laws, policies and plans; and to mitigate any adverse impacts on "culture, custom, economic stability or protection and use of the environment<sup>39</sup>."

Ordinance 219 requires the federal and state governments to prepare an impact statement for any proposed regulations that may affect "the ability of County citizens to use land and use and conserve natural resources for agricultural and livestock purposes." It directs federal and state agencies to avoid taking actions that are inconsistent with county right-to-farm laws and policies, or that would have the effect of making agriculture financially inefficient; and to give adequate consideration to the designation and use of lands as agricultural lands in the Comprehensive Plan<sup>40</sup>. The ordinance also addresses timber production; cultural resources, recreation, wildlife and wilderness; land acquisition and disposition; water and mineral resources; and clean air regulations.

Ordinance 219 was extremely controversial when it was approved and continues to be a subject of debate. Environmentalists strongly opposed the ordinance, claiming that it would interfere with laws designed to protect public health and natural resources. Many farmers and ranchers supported Ordinance 219 as a means to keep agriculture economically viable. County Commissioner Carey sees the ordinance as a farmland protection strategy, and argues that it has encouraged farmers and ranchers to become more involved in issues that affect them<sup>41</sup>.

#### LESSONS AND PROSPECTS FOR THE FUTURE

Walla Walla's farmland protection efforts are somewhat atypical in that they have been led almost exclusively by farmers. Many young farmers see land protection as a means of ensuring the future of agriculture in the county, and are working on plans, passing new regulations, and going to court to defend their ability to farm. Yet Walla Walla is also a very conservative community. Older landowners are suspicious of outside interests or interference in their affairs, and many are opposed to any restriction on their right to use their property as they choose. Although the county's farmers do not see eye-to-eye about land use issues, they do listen to their neighbors.

Many communities begin their efforts to protect farmland years or decades into the process of land conversion. Walla Walla, in contrast, is still predominantly agricultural, and farming is very profitable. The county retains a wealth of agricultural support services, and farmers are experimenting with new, high-value crops. The local government is still led by farmers.

Strong farmer leadership, a healthy agricultural economy and political support for farming give Walla Walla a unique opportunity to protect its agricultural land and prevent the widespread emergence of urban development that interferes with farming. The greatest challenge for Walla Walla's farmer leadership will be developing a consensus on agricultural land use issues that satisfies both conservationists and property rights advocates.

Washington provides a good example of how state and local governments can work together to address the challenges of farmland conversion. The state Growth Management Act provided counties with a mandate to protect important agricultural land. King County interpreted that mandate by revising its comprehensive plan and developing a wide range of regulatory and incentive-based proposals to protect farmland. Thurston County used the GMA to justify the enactment of agricultural protection zoning. In Walla Walla County, the GMA requirement to designate important agricultural land made farmland protection part of the local planning process. The county's young farmers have become strong advocates of growth management and have used GMA requirements as evidence to support a lawsuit challenging the development of housing on prime farmland.

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The history of farmland protection programs in King, Thurston and Walla Walla counties is also a good example of the diversity of techniques and strategies that communities can use to meet the challenges of farming on the edge. King County started with a PACE program, added limited agricultural zoning, and is investigating strategies to promote farming and provide assistance to farmers. Thurston County started with zoning, added PACE and TDR programs and is promoting farming through farmers' markets and road signs. Walla Walla is using APZ and a right-to-farm ordinance. All three counties have implemented farmland protection programs in the context of a comprehensive planning process and the state GMA.

The shortcomings of King County's PACE program suggest an important lesson for other communities. Protecting dispersed blocks of farmland from development is not enough

CONCLUSION

to sustain agriculture. PACE is a powerful farmland protection tool, but it must be used strategically. If land uses adjacent to protected farms conflict with commercial agriculture, farming is likely to decline or disappear, despite the fact that the land is protected. States, counties and towns need to take a comprehensive approach to the problems facing farmers in urban-influenced communities.

The key to political acceptance of farmland protection is involving the agricultural community from the outset. When Thurston County planners implemented emergency downzoning of farmland, they met with a hostile response from farmers. It took several years to restore trust. In Walla Walla County, the movement for agricultural protection zoning was led by farmers, who have slowly built political support for land protection.

Washington continues to be fertile ground for the development of innovative farmland protection programs. Whitman County is revising its comprehensive plan to protect farmland while allowing for residential and commercial growth. San Juan County has created a land bank funded by a 1-percent real estate transfer tax. Skagit County's PACE program, created in 1996, is funded by a 6.5-cent county property tax authorized by the Conservation Futures legislation; the same funding source used by Thurston County. Clallam, Pierce and Chelan counties are also investigating farmland protection techniques and strategies.

The emergence and growth of county farmland protection programs in Washington suggest two lessons for other places where farmland is threatened by development. First, state legislation can jump-start the development of local farmland protection programs. Second, the existence of one or two local programs can serve as examples and provide a starting point for other communities.

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# SECTION TWO: PUTTING IT ALL TOGETHER

CHAPTER 11: LEARNING BY EXAMPLE: THE FIVE I'S OF FARMLAND PROTECTION

The farmland protection experiences of counties in California, Maryland and Washington provide opportunities to examine what steps and processes worked along the way. States and communities facing similar challenges can learn from these efforts and adapt existing models and techniques to fit their own unique conditions.

INTRODUCTION

# THE FIVE I'S

Although no one has established a formula for success, the case studies reveal a consistent pattern in the process of designing an effective farmland protection strategy. We have taken these steps ourselves in communities across the nation, and call them the five I's. They include:

- Identification;
- Inventory;
- · Investigation;
- · Integration; and
- · Implementation.

The case studies provide many examples of how real people in real places have addressed the five I's. They show how important it is to engage a wide range of stakeholders in the effort to meet the challenges of farming on the edge. A strong coalition can facilitate approval of new legislation and public funding, ensure continued political support for farmland protection and secure a strong future for agriculture. Thus the additional "I" of involvement is necessary at every step.

# STEP ONE: IDENTIFICATION

The first step that a community must take is identifying its problems. While the challenges of farming on the edge are similar, the nature and scope of the problems facing agriculture are different in each state, county or municipality. In Walla Walla County, the pace of non-farm development is relatively slow, but the placement of even a few dozen new houses adjacent to active farms and ranches endangers the viability of neighboring operations. In Sonoma and Solano Counties, the tremendous *rate* of growth is the biggest challenge to stabilizing the land base. For dairy farmers in Marin and King counties, low commodity prices and structural changes in the dairy industry have been at least as big a problem as loss of farmland. Low profits have created an incentive for farmers to sell land for development. In Napa and Walla Walla counties, agriculture is highly profitable, but conflicts between farmers and their neighbors still threaten farming operations. Competition for water between farmers and homeowners is an emerging issue for agriculture in many western communities, including Solano and Walla Walla counties.

Outreach and involvement are critical parts of the identification process. While the threat to agriculture and farmland may first be recognized by farmers, planners or conserva-

tionists, it is rare for one group to have the power to create a solution alone. In Sonoma County, for example, conservationists' efforts to pass the Farmland Initiative failed largely because farmers were not involved in designing the proposed program and refused to support it. In some cases, farmers and conservationists may agree that farmland should be protected from development but disagree about the proper use of the land.

The most effective farmland protection strategies typically result from stakeholder consensus as to the extent and nature of the problems that need to be addressed and agreement that something can and should be done. Constituencies often reach beyond the farming and conservation communities. Those who have a vested interest in growth and development, such as builders, realtors, bankers and business people, may also want to be involved. Since protecting farmland affects the availability of land for future development, affordable housing advocates may be interested in program development. Remember, stakeholders who are excluded from the process of identifying the problem may oppose any solutions that are proposed in the future.

Identification of the problem can take many forms, from conversations between neighbors to formal discussion groups or stakeholder surveys. These forums can generate excitement, enthusiasm and sense of community spirit for the work ahead.

#### STEP TWO: INVENTORY

The next step is conducting an inventory of physical infrastructure and agricultural, natural and human resources. Inventory often starts with mapping farmland and soil resources. In addition, communities need detailed information on the different types of agricultural operations in their jurisdictions, the level of investment in agriculture, the profitability of farms and the number and types of agricultural support businesses. This information can help communities estimate a critical mass of farmland and determine what types of policies and programs are needed to stabilize the land base and ensure the economic viability of farming.

People are just as important as land to the future of agriculture. If the farm community is aging and there are few young farmers and ranchers who are willing or able to take their place, farms will be sold for non-agricultural purposes. In King County, a team of consultants noted the aging of the farm population and recommended that the county develop a program to facilitate the transfer of farms between generations. Information on land tenure can be helpful, as rented farmland may be more vulnerable to conversion than owner-operated farms. Availability of skilled farm labor is also vital to agricultural viability.

Assessing the location, quantity and quality of natural resources is another important step in the inventory process. Most agricultural operations need a reliable source of water to remain viable. Competition for water can be as big a threat to farms as competition for land. This is particularly true in areas where crops depend on irrigation, such as Sonoma, Solano, Napa and Walla Walla counties. In wet climates, too much water can be a problem. King County targeted large blocks of its most fertile agricultural land for protection, but failed to predict the impact that development of environmentally sensitive areas might have on the farms. As a result, new construction has caused mudslides and flooding on protected farmland, making some of it virtually useless for agriculture.

Agricultural land often encompasses rich natural, ecological and scenic resources. Mapping lakes, rivers, and streams, wetlands, wildlife habitat, unique ecosystems and scenic vistas can help communities develop strategies that protect both farmland and natural resources. In Thurston County, the inventory process led to a decision to purchase easements in the Nisqually Valley. The PACE program there is expected to prevent development adjacent to a wildlife refuge and maintain scenic views along the interstate highway, in addition to protecting more than 1,000 acres of high-quality agricultural land.

Finally, the presence of non-agricultural development and physical infrastructure such as roads, sewers and water lines can have a critical impact on the fate of agricultural land. When Montgomery County established its Agricultural Reserve, it excluded areas with public water and sewers, creating a buffer between urban and rural sections of the county.

Many communities have found the Land Evaluation and Site Assessment system to be a useful tool in the inventory process. LESA is a numerical rating system for farmland that measures both soil quality and site factors that make land more or less suitable for agriculture. Site factors can include everything from the size of a parcel and surrounding land uses to the existence of agricultural support services and public investment in water and sewer systems and public transportation. Some jurisdictions have used LESA to determine where agriculture is likely to be viable in the future. Others use LESA scores to delineate agricultural protection zones or determine whether specific parcels of land should be included in an agricultural district. Baltimore, Howard, Harford and Walla Walla counties have all used LESA systems as part of their farmland protection programs.\*

Maps are one of the most useful products created in the inventory process. If a geographic information system is available, maps can be automatically layered to show the locations where areas with fertile soils, active farms, adequate water supplies, important ecological resources and few public services overlap. These areas can then be targeted for protection. The 1996 King County Farm and Forest Report included a series of maps that showed zoning, parcel size, urbanization, new subdivisions, land value and improvements, and enrollment in the state's current use assessment program in rural areas of the county. These types of map can serve as a visual representation of the need for action, and can help farmland protection advocates explain their strategy to policymakers and the public.

## STEP THREE: INVESTIGATION

Investigation is the process of looking for solutions to the problems identified in step one. Investigation and inventory often occur simultaneously, as the inventory process informs the search for solutions. Conversely, the range of possible solutions to be investigated may dictate the type and extent of inventory work to be done.

A task force, working group or local planning department generally takes the lead on investigation. These groups focus the excitement and concern generated by agreement on the set of problems to be addressed and the need for solutions. Task forces can serve as forums to refine the issues, set goals, and resolve remaining disagreements between stakeholders.

<sup>\*</sup> Frederick R. Steiner, James R. Pease and Robert E. Coughlin, A Decade with LESA: The Evolution of Land Evaluation and Site Assessment (Ankeny, Iowa: Soil and Water Conservation Society, 1994), p. 60.

Generally, the first job of the task force is to determine its scope. This may include setting targets for the amount of farmland to protect and the extent of non-farm development to permit, building support for implementation of farmland protection techniques, securing funding if necessary and identifying agencies and organizations to administer the program.

It is important to ensure that a wide range of interests are represented on the task force. A Howard County task force involved farmers, conservationists, urban and rural residents and newcomers to the county as well as long-time natives. The comprehensive membership of the Work Force for the Preservation of Howard County Farmland helped the group get a state grant to support its activities, and was a key ingredient in the successful campaign to approve a PACE program for the county.

Every community faces unique challenges, and coming up with a set of solutions sometimes seems like an overwhelming task. Fortunately, there are plenty of places to go for help. The experiences of established state and local farmland protection programs can be very useful to new task forces. The case studies provide some good examples, and talking to local and state government agency officials who have managed farmland protection programs may be especially helpful. Farmers who have protected their own land are a good source of information on the benefits and drawbacks of different farmland protection strategies. Exploring, researching and analyzing the literature on farmland protection also can help communities narrow their options.

The investigation process may include:

- · Contacting other jurisdictions with successful farmland protection programs;
- Inviting experts on farmland protection to address the task force and public meetings;
- · Taking field trips to locations with successful farmland protection programs;
- · Conducting surveys of local residents to assess their support for different techniques;
- · Conducting library research; and
- · Searching electronic databases, such the Farmland Information Center at http://www.farmlandinfo.org.

American Farmland Trust is the only national organization expressly committed to stopping the loss of productive farmland. We offer a variety of products and services to assist individuals, organizations and community and government agencies. In addition, our Farmland Information Center, developed in cooperation with the NRCS and the National Agricultural Library, provides materials, technical assistance, referrals and other information services on farmland protection.

Thurston County hired consulting firms to conduct studies of the feasibility and cost of implementing PACE and TDR programs. The consultants based their research on the experiences of other communities that have used these techniques.

Even established farmland protection programs can benefit from some ongoing investigation. When its Farmland Preservation Program failed to stop the decline of agriculture, King County went back to the drawing board and hired a consulting team to investigate other options for protecting farmland and ensuring the future of farming. The consultants surveyed and interviewed farmers and landowners, and held public meetings for a wide range of stakeholders. The Farm and Forest Report recommended more than 25 different strategies to protect farmland and revitalize the county's agricultural sector.

#### STEP FOUR: INTEGRATION

The next step after inventory and investigation is to set goals and develop a strategy to protect farmland and ensure the future of agriculture. The proposed program should be based on the nature and scope of the problem and targeted to protect the most important agricultural lands. It should respond to the concerns of stakeholders and reflect the lessons learned by other communities. While the proposed strategy may resemble other farmland protection programs on paper, it should be the result of a unique, locally driven process.

The planning department in Carroll County based its proposal for agricultural protection zoning on several studies that documented the threat that non-agricultural land uses presented to working farms. The original proposal was modified after discussions with farmers revealed strong concerns about the new regulations. In addition, the county agreed to promote growth in residential areas to take some of the pressure off farmland. The result has been enthusiastic farmer support for county farmland protection programs.

The Solano County Farmland and Open Space Foundation is another example of integration, compromise and creative use of local resources, although the program resulted from settlement of a lawsuit rather than a consensus-building process. In exchange for the approval of the annexation of 2,400 acres for residential development, the city of Fairfield agreed to create and fund a private, nonprofit organization to purchase conservation easements. The organization is funded by special taxes levied on land within the annexed property.

Marin County implemented agricultural protection zoning in the early 1970s over the objections of the farming community. To address farmers' concerns, private citizens investigated other farmland protection options. They proposed the creation of a private, nonprofit land trust that would purchase agricultural conservation easements. This program was particularly well-suited to the political climate in the county. Farmers who had lost land as a result of the federal government's eminent domain proceedings were very suspicious of any scheme to give government agencies more control over private land. Farmers who might not have participated in a public PACE program were more willing to sell easements to the private Marin Agricultural Land Trust.

# STEP FIVE: IMPLEMENTATION

Implementation is the culmination and test of the whole process of creating a farmland protection program. The best task force or working group report is of little value if the proposals are not put into place. Implementation includes the approval, funding and administration of a program to protect farmland. Some programs are enacted by a state legislature or a county board; other programs are implemented by public vote. The first part of implementation is building public support among key constituencies, including farmers and other residents and politicians. The more these people have been involved in the process of creating a program, the more likely they will be to support its implementation. Typically, building public support involves mailings, meetings and media campaigns. Any documents that have been created during the first four steps of the process, such as maps and reports, can be useful in the effort to promote the program.

The Agricultural Advisory Committee in Thurston County helped the regional planning council investigate the feasibility of a TDR program to protect farmland. When the study was complete, the council began to doubt that the public would support the program. But the farmers on the advisory committee, who understood TDR and believed it could work in the county, became the program's strongest advocates. They explained and promoted the proposal to their peers and other stakeholders and won support for its approval. Thurston County's experience is an excellent example of how involving the public early in the process of creating a farmland protection program can pay off in the end.

In Sonoma County, county supervisors appointed a board to study a proposal for an open space district that would purchase easements on farmland. The supervisors intentionally appointed to the board the people who would be most likely to oppose the plan. Business leaders and farmers worked together to refine the proposal, and supported the campaign to approve a 0.25-percent sales tax to fund the program. County residents voted in favor of the program and the tax.

Several of the case study counties have used their comprehensive plans as a blueprint to implement farmland protection strategies. The 1980 general plan for Solano County created new categories of farmland. These categories were used to amend the zoning ordinance. Sonoma County used its comprehensive plan to facilitate construction of housing for farm employees. The *Plan for the Preservation of Agricultural Land and Open Space* built a foundation for the approval of agricultural protection zoning and a TDR program in Montgomery County.

Implementation is an ongoing process that includes administration, assessment of success, program modification and reauthorization. The state of Maryland has greatly increased funding for farmland protection. Napa County has increased minimum lot sizes in its agricultural zones, and voters have approved several ballot initiatives that limit development. Walla Walla County enacted a right-to-farm ordinance to address conflicts between farmers and their neighbors. Montgomery County created a PACE program to improve the private market for development rights. The most successful farmland protection programs responded to changing conditions by improving and expanding over time.

All across the country, people are working with state and local governments to meet the challenges facing agriculture in developing communities. Local governments are protecting farmland by planning and zoning for agriculture and implementing PACE and TDR programs. State governments are setting the ground rules for planning, providing tax incentives for keeping land in agriculture, enacting right-to-farm and agricultural district laws, and appropriating funding for PACE. The most successful efforts generally result from cooperation between different types of people with different vested interests in land use issues. The tools in the farmland protection toolbox are being used to build an infrastructure to support the farms of the future.

NOW IS THE TIME FOR ACTION

We have learned that simply preserving farmland is not enough. For agriculture to thrive in the new millennium, we must contain sprawl and promote farming in increasingly diverse communities. Traditional tools, especially if they are used individually, may not be enough to keep agriculture profitable in developing areas. The most innovative farmland protection programs are helping producers add value to traditional commodities and market to urban consumers. Some communities have realized that agriculture can be an engine for economic development that benefits farmers and non-farmers alike.

Competition for land and other natural resources is a growing challenge for farmers in developing communities. Disagreements about the proper use of water and ecologically sensitive land are increasingly common. Fortunately, protecting farmland can benefit both agriculture and the environment. State and local governments need to educate citizens about the environmental benefits of agriculture and provide incentives for farmers and ranchers to adopt practices that conserve water, soil and wildlife habitat.

When all is told, farmland is a productive asset. Saving it is an investment for our children, our communities and our country. We must be strategic in our approach to protecting farmland, and understand its many values so American agriculture can continue to provide a source of renewable wealth that no nation can challenge. We must recognize the forces that lead to farmland conversion and address the challenges communities face to their resource bases. So far, we have achieved a lot acting primarily at the state and local levels, policy by policy, plan by plan, farm by farm. But as the competition for land and resources intensifies, we also need a more systematic national effort. This will take vision, planning, private initiative, policy development and dedicated community action.

We at American Farmland Trust hope this book will serve as a seed for new state and local farmland protection programs and for creative thinking about new approaches. Establishing those programs is up to you: farmers and ranchers, conservationists, public officials, planners, developers, and all the other people who care about local land use issues and the future of agriculture in their communities. We hope this book will help.

We will continue to do everything we can to provide information, assistance and services to people working to ensure a future for farmland in their communities. We hope we have helped convince you of the economic importance of American agriculture and the role farming can have in enhancing environmental quality. We hope we have helped you appreciate that farmland makes an important contribution to local fiscal stability and how much a working landscape can add to our quality of life. Finally, we hope this book has provided a deeper

understanding of farmland protection techniques and that the case studies have given you ideas and inspiration to apply in your own community.

We monitor federal, state and local activities on a regular basis. Let us know about your efforts so we can continue to serve as the nation's primary source of information on farmland protection. Visit the Farmland Information Center at http:\\www.farmlandinfo.org, or call (413) 586-4593 for technical assistance. Together we can save American's farmland and secure a future for agriculture in the 21st Century.

For more information, contact us at:

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# National Association of Conservation Districts

509 Capitol Court, NE Washington, D.C., 20002 (202) 547-6223 http://www.nacdnet.org

# Natural Resources Conservation Service

South Agriculture Building 14th Street and Independence Avenue, S.W. Washington, D.C. 20250 (202) 720-7671 http://www.nrcs.usda.gov

# Soil and Water Conservation Society

7515 N.E. Ankeny Road Ankeny, IA 50021-9764 (515) 289-2331

Web Address: http://www.swcs.org

## U.S. Department of Agriculture

Washington, D.C. 20250 (202) 720-2791

Web Address: http://www.usda.gov

## Adequate Public Facilities Ordinance

A form of comprehensive growth management that prevents new homes from being built in a community until municipal services such as sewers, roads, public water supplies and schools are available to serve the new residents.

# Agricultural Conservation Easement

A legal agreement restricting development on farmland. Land subjected to an ACE is generally restricted to farming and open space use. See also conservation easement.

# Agricultural District

A legally recognized geographic area formed by one or more landowners and approved by one or more government agencies, designed to keep land in agriculture. Agricultural districts are created for fixed, renewable terms. Enrollment is voluntary; landowners receive a variety of benefits that may include eligibility for differential assessment, limits on annexation and eminent domain, protection against unreasonable government regulation and private nuisance lawsuits, and eligibility for purchase of agricultural conservation easement programs. Also known as agricultural preserves, agricultural security areas, agricultural preservation districts, agricultural areas, agricultural incentive areas, agricultural development areas and agricultural protection areas.

# Agricultural Protection Zoning (APZ)

Zoning is a form of local land use regulation. Agricultural protection zoning ordinances protect the agricultural land base by limiting non-farm uses, prohibiting high-density development, requiring houses to be built on small lots and restricting subdivision of land into parcels that are too small to farm.

## APZ takes many forms:

Exclusive agricultural zoning prohibits non-farm residences and most non-agricultural activities; exceptions are made for parcels of land that are not suitable for farming.

Large minimum lot size zoning ordinances require a certain number of acres for every non-farm dwelling, typically at least 20 acres in the eastern United States or at least 35 acres in other regions.

Area-based allowance ordinances establish a formula for the number of non-farm dwellings permitted per acre, but houses are typically built on small lots.

Fixed area-based allowance ordinances specify a certain number of units per acre.

Under sliding scale area-based allowance ordinances, the number of dwellings permitted varies with the size of the tract. Owners of smaller parcels are allowed to divide their land into more lots on a per-acre basis than owners of larger parcels.

# Annexation

The incorporation of land into an existing community that results in a change in the community's boundary. Annexation generally refers to the inclusion of newly incorporated land but can also involve the transfer of land from one municipality to another.

# **Appraisal**

A systematic method of determining the market value of property.

## Bargain Sale

The sale of property or an interest in property for less than fair market value. If property is sold to a qualifying public agency or conservation organization, the difference between fair market value and the agreed-upon price can be claimed as a tax-deductible charitable gift for income tax purposes. Bargain sales are also known as conservation sales.

#### **Buffers**

Physical barriers that separate farms from land uses that are incompatible with agriculture. Buffers help safeguard farms from vandals and trespassers, and protect homeowners from some of the negative impacts of commercial farming. Vegetated buffers and topographic barriers reduce the potential for clashes between farmers and their non-farming neighbors. Buffers may be required by local zoning ordinances.

#### Circuit Breaker Tax Relief

A tax abatement program that permits eligible landowners to take some or all of the property tax they pay on farmland and farm buildings as a credit to offset their state income tax. Generally, farmers are eligible for a credit when property taxes exceed a set percentage of their income.

# Cluster Zoning

A form of zoning that allows houses to be built close together in areas where large minimum lot sizes are generally required. By grouping houses on small sections of a large parcel of land, cluster zoning can be used to protect open space. Also known as cluster development, land preservation subdivision, open land subdivision and open space subdivision.

#### Community Supported Agriculture (CSA)

A form of direct marketing of farm products that involves customers paying the farmer in advance for a weekly share of the harvest. Customers are often called shareholders. In some cases, shareholders may participate in farm work and farm decisions. Farms that use this marketing strategy are called "CSA farms" or "CSAs." CSA is also known as subscription farming.

# Comprehensive Growth Management

A state, regional, county or municipal government program to control the timing, location and character of land development.

## Comprehensive Plan

A regional, county or municipal document that contains a vision of how the community will grow and change and a set of plans and policies to guide land use decisions. Comprehensive plans are also known as general plans and master plans.

# **Conservation Easement**

Legally recorded, voluntary agreements that limit land to specific uses. Easements may apply to entire parcels of land or to specific parts of the property. Most are permanent; term easements impose restrictions for a limited number of years. Land protected by conservation easements

remains on the tax rolls and is privately owned and managed; landowners who donate permanent conservation easements are generally entitled to tax benefits. See also agricultural conservation easement and purchase of agricultural conservation easements.

# Corn Suitability Rating (CSR)

A numerical system for rating the productivity of farmland, used primarily in Iowa.

# Cost of Community Services (COCS) Study

A case study method of allocating local government expenses to different land use categories. COCS studies reveal how much it costs to provide services to privately owned residential, commercial, industrial, forest and agricultural land.

#### Current Use Assessment

See differential assessment.

#### Deferred Taxation

A form of differential assessment that permits eligible land to be assessed at its value for agriculture. Taxes are based on how much money the land could produce in crops or livestock, instead of its speculative value for development. Deferred taxation is similar to preferential assessment, but landowners must pay some or all of the taxes that were excused if they later convert land to ineligible uses. Rollback taxes assess the difference between taxes paid under differential assessment and taxes that would have been due if the land was assessed at fair market value.

# **Development Rights**

Development rights entitle property owners to develop land in accordance with local land use regulations. These rights may be sold to public agencies or qualified nonprofit organizations through a PACE (or PDR) program. Sale of development rights to a government agency or land trust generally does not pass any affirmative interest in the property. Rather than the right to develop the land, the buyer acquires the responsibility to enforce the negative covenants or restrictions stipulated in the development rights agreement.

Development rights may also be sold to individuals or a government agency through TDR (or TDC) programs. In this case, the buyer does acquire a positive right to develop land, but the right is transferred to a site that can accommodate growth.

## Differential Assessment

An agricultural property tax relief program that allows eligible farmland to be assessed at its value for agriculture rather than its fair market value, which reflects "highest and best" use. Takes three different forms: preferential assessment, deferred taxation and restrictive agreements. Also known as current use assessment, current use valuation, farm use valuation and use assessment.

#### Downzoning

A change in the zoning for a particular area that results in lower residential densities. For example, a change from a zoning ordinance that requires 10 acres per dwelling to an ordinance that requires 40 acres per dwelling is a downzoning.

#### Farm Bureau

A national, non-profit advocacy organization for farmers. The Farm Bureau has chapters in all fifty states and in many agricultural counties.

#### Farm Link

A program that matches retiring farmers who want to keep their land in agriculture with beginning farmers who want to buy a farm. Farm Link programs are designed to facilitate farm transfer, usually between farmers who are not related to each other. Also known as Land Link.

#### Farming on the edge

Refers to the problems of farming in developing communities. "Farming on the Edge" is also the title of two American Farmland Trust reports.

## Fee Simple

A form of land ownership that includes all property rights, including the right to develop the land.

# Generally Accepted Agricultural Management Practices (GAAMPs)

Agricultural practices that are widely used by farmers, promoted by agricultural institutions such as Extension and comply with federal and state environmental, health and safety laws and regulations. Some states have specific definitions of GAAMPs that may be used to determine whether a particular farm practice constitutes a public or private nuisance.

## Geographic Information System (GIS)

A method of storing geographic information on computers. Geographic information can be obtained from a variety of sources, including topographical maps, soil maps, aerial and satellite photographs, and remote sensing technology. This information can then be used to create special maps for recordkeeping and decision-making purposes. GIS systems may be used to maintain maps of protected land or make decisions about which farmland to protect.

## Land Evaluation and Site Assessment (LESA)

A numerical system that measures the quality of farmland. It is generally used to select tracts of land to be protected or developed.

## Land Link

See farm link.

#### Land Trust

A private, nonprofit conservation organization formed to protect natural resources such as productive farm and forest land, natural areas, historic structures and recreational areas. Land trusts purchase and accept donations of conservation easements. They educate the public about the need to conserve land, and some provide land use and estate planning services to local governments and individual citizens.

#### Local Agency Formation Commission (LAFCO)

A California state agency existing in each county, LAFCOs consist of commissioners from city councils, county boards of supervisors and members of the general public. They function as boundary commissions with the power to approve or deny requests for annexation of land from unincorporated (county) areas into incorporated (city) areas. LAFCOs also have authority to incorporate cities, establish or modify "sphere of influence" boundaries, and create or expand special district boundaries.

#### Mitigation Ordinance

An ordinance or section of an ordinance or state law that requires developers of agricultural land to protect an equivalent quantity of land with similar characteristics in the same political jurisdiction. In some cases, developers may satisfy the mitigation requirement by paying a fee.

#### National Resources Conservation Service (NRCS)

Formerly known as the Soil Conservation Service, NRCS is a federal agency within the U.S. Department of Agriculture that provides leadership and administers programs to help people conserve, improve and sustain our natural resources and environment. The agency provides technical assistance to farmers and funds soil conservation and farmland protection programs. It also maintains statistics on farmland conversion. NRCS has offices in every state and in most agricultural counties.

#### Planned Unit Development (PUD)

A tract of land that is controlled by one entity and is planned and developed as a whole, either all at once or in programmed stages. PUDs are developed according to detailed site plans and may incorporate both residential and commercial land uses. They generally include improvements such as roads and utilities.

### Preferential Assessment

A form of differential assessment that permits eligible land to be assessed at its value for agriculture. Taxes are based on how much money the land could produce in crops or livestock, instead of on its speculative value for development.

## Purchase of Agricultural Conservation Easements (PACE)

PACE programs pay farmers to keep their land available for agriculture. Landowners sell an agricultural conservation easement to a qualified government agency or private conservation organization. Landowners retain full ownership and use of their land for agricultural purposes. PACE programs do not give government agencies the right to develop land. Development rights are extinguished in exchange for compensation. PACE is also known as purchase of development rights (PDR) and as agricultural preservation restriction (APR) in Massachusetts.

# Purchase of Development Rights (PDR)

See purchase of agricultural conservation easements.

#### Real Estate Transfer Tax

A state or local tax imposed on the sale of real property.

#### Receiving Area

Areas designated to accommodate development transferred from agricultural or natural areas through a TDR (or TDC) program.

## Restrictive Agreements

A type of differential assessment that requires landowners to sign a contract to keep land in agricultural use for 10 years or more as a condition of eligibility for tax relief. If the landowners gives notice of intent to terminate the contract, assessed value of the property increases during the balance of the term to the full fair market value.

#### Right-to-Farm Law

A state law or local ordinance that protects farmers and farm operations from public and private nuisance lawsuits. A private nuisance interferes with an individual's use and enjoyment of his or her property. Public nuisances involve actions that injure the public at large.

## Sending Area

Area to be protected through a transfer of development rights program. Landowners may sell their development rights to private individuals or a government agency; the rights are used to build homes in a designated receiving area.

#### Sethack

A zoning provision requiring new homes to be separated from existing farms by a specified distance and vice versa.

#### Special Assessment

A charge that state and local governments can impose on landowners whose land benefits from the construction of roads or sewer lines adjacent to their property. The amount of the special assessment is usually the pro rata share of the cost of installing the improvement.

#### **Taking**

An illegal government appropriation of private property or property rights. Traditionally, takings law has addressed physical seizures of land, but regulations that deprive landowners of certain property rights may also result in a taking in special circumstances. Courts decide whether a particular government action constitutes a taking.

## Transfer of Development Rights (TDR) Program

A program that allows landowners to transfer the right to develop one parcel of land to a different parcel of land to prevent farmland conversion. TDR programs establish "sending areas" where land is to be protected by agricultural conservation easements and "receiving areas" where land may be developed at a higher density than would otherwise be allowed by local zoning. Landowners in the sending area sell development rights to landowners in the receiving area, generally through the private market. When the development rights are sold on a parcel, a conservation easement is recorded and enforced by the local government. In some cases, the local government may establish a "TDR bank" to buy and sell development rights. The development rights created by TDR programs are referred to as transferable development rights (TDRs) or transferable development credits (TDCs).

## Upzoning

A change in the zoning for a particular area which results in higher residential densities. For example, a change from a zoning ordinance that requires 100 acres per dwelling to an ordinance that requires 25 acres per dwelling is an upzoning.

# **Urban Growth Boundary**

A theoretical line drawn around a community that defines an area to accommodate anticipated growth for a given period of time, generally 20 years. Urban growth boundaries are a growth management technique designed to prevent sprawl. They are often used to guide decisions on infrastructure development, such as the construction of roads and the extension of municipal water and sewer services.

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