The following is an excerpt from *Chapter 2 - Identifying & Resolving Quality of Life Issues* from the Community & Environmental Defense Services (CEDS) book *How to Win Land Development Issues: A Citizens Guide to Preserving & Enhancing Quality of Life in Developing Areas*. You will find this section more helpful if you read the Chapter 2 introductory text. Also, the following is just the text we could fit into the book without making it unduly large. We have a substantially greater amount of information available in our files on this topic. To learn how CEDS can assist you with concerns about this topic visit the CEDS website at: www.ceds.org or contact us at: 1-800-773-4571 or info@ceds.org

OPEN SPACE

If you look at a land use map of the United States then you see that most of the nation is open space - farms, forest, desert, mountains, prairie, wetlands, lakes, and so forth.[1] But this is not true for the urban-suburban areas where most of us live. And the pace at which growth is gobbling up our open space is accelerating. In the 1980s we were losing 1.2 million acres of rural land a year, which increased to an annual loss of 2.2 million acres in the 1990s.[2]

Preserving open space does not mean stopping growth, just growing smarter. In most cases a community can accommodate anticipated growth by concentrating new homes and businesses in a way that minimizes loss of open space and actually reaps more benefits, such as lower taxes. But before getting into *Smart Growth* techniques perhaps it would be helpful to review the benefits of open space, which include:

- much of our food comes from farms'
- farming is an important part of our economy;
- open space is frequently the source of our cleanest drinking water;
- trees and other open space vegetation improve the quality of our air;
- our highest quality waters are associated with undisturbed open space (e.g. forests); and
- open space recreation areas have been shown to reduce urban crime; and
- urban open space also provides residents with limited mobility an opportunity to enjoy and learn of the natural world.

In 1982, 44% of the United States was farmland.[3] In 1997, the figure dropped to 41%. According to a study by the American Farmland Trust, we are losing our best, most productive agricultural lands at a rate 30% faster than other open space.[4] Most alarming is that 83% of our fruits and vegetables and 63 percent of our dairy products, come from farms in urban-influenced

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[1] To view a map of United States land use visit: http://www.epa.gov/ceisweb1/ceishome/atlas/nationalatlas/landusecover.htm

[2] The rate of rural land conversion was obtained from the U.S. Natural Resources Conservation Service website: http://www.farmlandinfo.org/

[3] Based on data available on the American Farmland Trust website at: http://www.farmlandinfo.org/fic/census/1997usa.html

[4] See *Farming on the Edge* at: http://www.farmland.org/farmingontheedge/index.htm

areas.[5] Conversion of these farmlands to suburbia is pushing agriculture onto marginal lands where, generally, more fertilizers, pesticides, and irrigation is needed and where soil erosion rates may be higher. So our food is coming at a higher cost in terms of dollars and environmental impact.

The Trust for Public Lands (TPL) documented the financial benefits of land preservation in their report *The Economic Benefits of Parks & Open Space*.[6] A number of studies have put a dollar value on the water quality benefits of preserving open space. For example, the TPL report described a proposal to develop a 16,000-acre area of open space known as Sterling Forest. The forest provided drinking water for two million New York and New Jersey residents. An analysis showed that a $160 million treatment facility would be needed to remove the drinking water contaminants resulting from development of Sterling Forest. Instead, an effort lead by TPL and the Open Space Institute raised $55 million to preserve 90% of the forest and eliminate the need for a new treatment plant - a savings of $105 million!

Open Space Preservation Techniques

The best way to preserve open space is to concentrate growth within and adjacent to existing towns, cities and other population centers. This is the essence of *Smart Growth*. And this approach to growth management truly is smart. Consider the cost of providing public services to a new home at the edge of town compared to one built a mile or two out of town. It would be far more expensive to extend water and sewerlines to the rural home, it would take longer to reach the home by school bus and by emergency service vehicles. All this adds up to more tax dollars to provide services for the rural home when compared to one built at the edge of town.[7]

Following are the *Smart Growth* techniques for guiding development to existing population centers. One of the best sources for further detail on many of these techniques is the American Farmland Trust Farmland Information Library http://www.farmlandinfo.org/ Another great resource is *Getting to Smart Growth: 100 Policies for Implementation* which is available for download from the Plannersweb at: http://www.smartgrowth.org/pdf/gettosg.pdf

Acquisition: Occasionally a tract of land is considered so important that some government or private entity will purchase it. But acquisition of proposed development sites is rare. Acquisition funds are usually quite limited and lands targeted for development are frequently more expensive to acquire. It may cost two- to ten-times as much to acquire a development site compared to other lands. Nevertheless, over the past decade citizen success in winning acquisition of development sites has become more common. For further detail see *Land Preservation* in Chapter 4 of this book.

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[5] Ibid.

[6] To view the report *The Economic Benefits of Parks & Open Space* and the many other resources available from the Trust for Public Lands visit: http://www.tpl.org/index.cfm

[7] For further detail see the Sierra Club report *Sprawl Costs Us All* available for download at: http://www.sierraclub.org/sprawl/report00/sprawl.pdf

Clustering: One way to reduce loss of open space is to require clustering of rural development projects. In other words, rather than allowing, say, 20 five-acre lots on a 100-acre tract of land, the homes must be clustered on 20 one-acre lots, thereby preserving 80% of the site as open space.

Clustering is not the most effective way to preserve working farms. For a farm to remain viable, a minimum acreage is needed so fields can still be worked economically. Clustering can fragment agricultural land in a way that renders the remainder unsuitable for family farming. Some local governments also give a bonus density for clustered projects. For example, if the unclustered density is one house per five acres then the clustered density might be one per four.

In the previous discussion of septic systems mention was made of the relationship between water quality and septic system density. Care must be taken to ensure that clustering does not result in a concentration of septic systems in areas where water quality may be threatened, such as near existing homes served by shallow wells or waters that are sensitive to nutrients and bacteria.

Conservation Easements: If a property owner wishes to preserve their land but they don't want to give up title, then granting a conservation easement is one option. The owner signs an agreement in which they give up the right to develop their property, usually in exchange for a reduction in taxes. The agreement may be for a specific period, such as 10 to 25 years, or in perpetuity. The agreement will usually name a third party to enforce the terms. Frequently, a land trust is involved in conservation easements. To learn of land trusts in your area visit the Land Trust Alliance website at: http://www.lta.org/

Designated Growth Area: The idea behind this *Smart Growth* tool is to designate areas where growth will be concentrated and other areas to remain rural. On the west coast designated growth areas are established with Urban Growth Boundaries. In Maryland they are called Priority Funding Areas. Regardless of the terminology used, they grew out of water and sewer service areas.

Good designated growth areas call for densities of at least four housing units per acre, while no more than one unit per 20 acres is permitted in rural areas. The boundary is usually established through the master plan or comprehensive land use planning process and implemented through zoning. Normally, sufficient land is included within the designated growth area to accommodate anticipated development needs for the next 20 years.

Discourage New Roads: Growth tends to follow the construction of new roads. This is because people prefer to live where traffic congestion is minimal, so extending a road into undeveloped areas can dramatically accelerate the pace of growth. This phenomenon is called *induced growth.* Smart growth principles dictate that public funds previously used to extend roads into rural areas be used instead to improve transportation within existing developed areas.[8] If a road must pass through a rural area, and the intent is not to accelerate growth, then measures must be

[8] For further detail on how road construction accelerates loss of open space see the TPL report *Taking the High Road*, which is available for download at http://www.tpl.org/tier3_cd.cfm?content_item_id=10863&folder_id=175

in place to ensure that sprawl will not follow. These measures may include downzoning, TDRs or PDRs, and so forth. But even with these measures, extending a new road into a rural area can lead to tremendous pressure on local decision-makers to allow development. For example, imagine a situation in which a major employer proposes to move to your area, but only if they can upzone a site along the new road. And, oh by the way, could they also get another large chunk of land upzoned for residential development to house their employees?

Forests Conservation: If you can gain access to the site, then look for any factors which may cause existing forest to be of unique importance. Look for *old-growth forest* (more than 150 years old), trees that are unusually large, or forests that support unique wildlife populations. Some local jurisdictions and states have mandated the protection of existing forests.[9] If such a mandate exists in your area, then determine if the project fully complies with a strict interpretation of forest conservation requirements. If forest conservation is not mandated in your area, then consider lobbying for the enactment of such a law *(See Change the Law in Chapter 4 of this book)*.

Limited Development Venture: The purpose of this option is to do just enough development on a site to cover the cost of acquisition and other expenses. For example, let's say a hundred acre farm could be developed as 20 five-acre lots under current zoning. If we clustered the 20 houses on one-acre lots then 80% of the site could be saved. But maybe we only need to sell five houses to generate the income needed to cover site acquisition and development costs. If the five lots are an acre each then the remaining 95% of the site could be preserved in a natural state. To learn more about how a limited development venture might work in your area contact the American Farmland Trust, the Land Trust Alliance, or the Trust for Public Lands.

Public Subsidies: One study showed that each new home costs taxpayers $20,000 to $30,000.[10] About half of this is for schools and the rest is for water, sewer, roads, and other public services. In the past, tax dollars would be used to cover much of the cost for the new schools, roads, sewers, and other services necessitated by rural development. Under *Smart Growth* public subsidies are only used to foster more compact development - a minimum of four or five housing units per acre. This provides a strong disincentive to rural sprawl and encourages development within or next to existing towns and other population centers. If a developer wishes to create a new bit of rural sprawl, then they must pick-up the cost - not the taxpayers.

Purchase or Transfer of Development Rights: PDRs and TDRs are two closely related approaches for preserving open space. Through PDRs a government agency purchases the development rights associated with a tract of land. The amount paid is usually the difference between the appraised value if sold to a development company minus the value of the land if it were sold to a farmer. The source of government funds used to purchase development rights may come from general revenue or specialized taxes, such as on the transfer of land. About

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[9] For an example of a State mandated forest conservation program implemented at the local level view: http://dnrweb.dnr.state.md.us/download/forests/fca.pdf

[10] *Better Not Bigger* by Eben Fodor, New Society Publishers.

400,000 acres of land have been preserved in the United States through PDRs.[11]

Through TDRs developers are either encouraged or required to purchase development rights from owners of rural land. The development right is then transferred to a parcel within a designated growth area. Some jurisdictions allow increased (bonus) density when TDRs are used. Fifty local jurisdictions (counties-towns) in 17 states have enacted TDR programs.[12] Nearly 90,000 acres have been protected nationally, though half of the preserved acres are in Montgomery County, Maryland.[13] TDRs work best when development activity is high and their use is mandatory. But care must be taken to protect existing residents within designated growth areas (receiving zones) from the impact of excessive growth - allowing development to outstrip public services.

Right-To-Farm Programs: A key to preserving rural lands is to help farmers keep suitable lands in production. If residential development sprawls into farming areas then conflicts build. Newcomers complain about odors and noise as well as getting stuck behind slow moving farm equipment. A number of jurisdictions have enacted right-to-farm laws which protect farmers from complaints or lawsuits regarding normal agricultural practices.[14]

Zoning: Through zoning local government regulates what uses may be made of a parcel of land. The intent is to protect adjoining property owners from incompatible uses and to increase the likelihood that a community grows in a way which enhances overall quality of life. The zoning tools most important to open space preservation are density or minimum lot size. To preserve farmland, AFT suggests no more than one house per 20 acres, though some agricultural preservation zones in the west allow as little as one house per 640 acres (a square mile).

Zoning must be coupled with other measures to preserve working farms. For many agricultural operations, farm fields must be of a certain minimum acreage for the operation to remain viable. Downzoning farmland to one house per 20 acres could result in a transformation of the countryside from pasture and cropfields to expensive houses on big lots (McMansions). The most effective preservation programs make it possible for farmers to keep their land in production without unduly sacrificing the equity in their land.

For obvious reasons, a proposal to downzone land from, say, one house per acre to one per 20 acres will meet with considerable opposition from property owners and the real estate-development community. The likelihood of a successful downzoning effort increases if some form of compensation can be provided to property owners, such as reduced property taxes or cash payments through programs such as transfer or purchase of development rights (TDR or

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[11] The acreage of lands protected through PDRs is based upon a factsheet prepared by 1000 of Minnesota and available for viewing at: http://www.1000fom.org/lctools4.htm

[12] See the American Farmlands Trust factsheet on TDRs at: http://www.farmlandinfo.org/

[13] Ibid.

[14] For further detail see the American Farmlands Trust Right-To-Farm factsheet available for download at: http://www.farmlandinfo.org/

PDR).

Application of Open Space Preservation Techniques

If you are concerned about a development project proposed for a rural site, then check to see if any of the preceding open space preservation techniques are already on the books and, if so, can they be applied to the site. If a key technique is not in place, then it will be very challenging to win adoption in a manner that causes it to apply to the project. The trouble will be that the law enacting the preservation technique will likely grandfather (exclude) any project which is already in the review process. However, you may succeed in structuring the law so it applies to all projects which have not yet reached the final stage of the process, usually building permit issuance.