FOR195

UF UNIVERSITY of FLORIDA
IFAS Extension

Land Use in the Wildland-Urban Interface: Land Conservation Tools and Zoning[1]

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The wildland-urban interface is an area of changing land uses – often an increasing amount of development leading to increasingly fragmented natural areas. Residents, planners, and community members who are concerned about the ecological, economic, and aesthetic future of their regions are finding assistance in land conservation tools and zoning mechanisms. Used in combination or on their own, the land conservation tools and the types of zoning outlined in this fact sheet can improve ecological conditions, create recreational opportunities, and reduce human conflicts in the wildland-urban interface.

Land Conservation Tools

A number of tools and strategies are available to help conserve undeveloped land in wildland-urban interface areas. The following land conservation tools can help provide forest connectivity, protect wildlife habitat, create areas for recreation, enhance water quality and quantity, and conserve natural resources. These are tools that can help protect rural areas and reduce challenges in the interface.

Advanced acquisition/land banking involves the government purchase of undeveloped land. The government can resell the parcel with restrictions, i.e., conservation easements. Natural resource professionals can help identify threatened parcels and influence the timing of development and land speculation (purchasing land for profit) (Daniels and Daniels 2003).

Developer exactions/dedications require developers to provide amenities and infrastructure such as parks, streets, and schools in return for development approval. This approach enables local governments to negotiate to meet some of their infrastructure needs and can be used to promote smart growth or meet other community objectives (Daniels and Daniels 2003).

Eminent domain allows a local government, if authorized by the state, to take private property in condemnation action if the local government can show that the seizure is necessary and for a public use or purpose. Just compensation must be paid to the landowner. Condemnation of private land for use as local parks or condemnations of private property that is later sold to private developers in the

1. This document is FOR195, one of a series of the School of Forest Resources and Conservation Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date July 2008. Visit the EDIS Web Site at http://edis.ifas.ufl.edu.
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implementation of an urban renewal program are examples of how eminent domain can be used to reduce interface issues (Myszewski 2005).

Fee-simple purchases enable local governments and private organizations to acquire property for conservation or public use. Natural resource professionals may nominate or recommend certain environmentally sensitive lands for purchase. Buyers typically pay market price for the land (Daniels and Daniels 2003).

Impact/development fees are one-time charges to developers by the local government to cover the cost of capital improvements or facility expansions made necessary by the development such as schools, roads, and sewers (Daniels and Daniels 2003).

Conservation easement (land preservation agreement) is a legally binding contract between a landowner and an agency or organization (such as a land trust) in which the landowner agrees to permanently eliminate specified uses of the land while retaining ownership and general control. The landowner and agency or land trust work together to determine which uses should be prohibited to protect the conservation values of the land and which uses should be retained for future owners. Such agreements often require an annual management plan that is cooperatively developed by the landowner and agency or land trust (Low Country Open Land Trust 2005). For more information on conservation easements see other EDIS fact sheets at: http://edis.ifas.ufl.edu/FR149 and http://edis.ifas.ufl.edu/uw194 .

Land trusts are private, not-for-profit organizations created to help landowners preserve their land by various means (Daniels and Daniels 2003). Examples are The Nature Conservancy and the Land Trust Alliance (Randolph 2004).

Purchase of development rights removes the development potential from land, providing protection while compensating landowners. The owner retains the property but gives up the right to develop it. Purchasing development rights can help agencies or organizations conserve sensitive lands at a lower cost than fee-simple purchases (Daniels and Daniels 2003).

Scenic easements involve acquiring land by purchase, dedication, or other means. Such easements may include restrictions on the types of signs and placement of signs or other visual objects that might obstruct views (Daniels and Daniels 2003).

Transfer of development rights enables the shift of development rights from areas where conservation is desirable to designated development areas. It enables agencies and organizations to conserve large tracts of land and promote dense urban development. In some cases landowners must be compensated if they are losing the market value of their development potential (Daniels and Daniels 2003).

Figure 1. Land conservation is important for protecting forest connectivity and enhancing wildlife habitat. Credits: Larry Korhnak

Zoning Types

Zoning ordinances have traditionally been used to separate incompatible land uses. Recently they have been used to guide land development regulations and give specific parameters to development. Below are several types of zoning used in land-use planning.

Agricultural zoning forbids the use of reserved land for conflicting non-farm purposes in order to protect a critical mass of farms and farmland from development. It also provides reduced property taxes.

Conservation zoning/limited development in environmentally sensitive areas requires low-density or no development on land that is determined to be environmentally significant or sensitive. These zones help protect greenspace for

wildlife habitat, wetlands, and floodplain areas (Myszewski and Kundell 2005).

Flexible/mixed-use zoning encourages mixed residential/commercial development and denser growth in cities. Such zoning creates more opportunities for residents to access work, shopping and entertainment easily without the use of automobiles (Myszewski and Kundell 2005).

Floating zones are districts that are not designated on the city's zoning map until a developer or landowner applies for a specific designation. An applicant must demonstrate that the project's effects on the surrounding area will be appropriately managed for that environment (Juergensmeyer and Roberts 1998).

Forestry zoning forbids the use of reserved land for conflicting, non-forestry purposes in order to protect a critical mass of commercial timberland from development. It also enables a reduction in property taxes.

Incentive zones provide significant waivers of zoning requirements to developers who agree to build according to specific guidelines. For example, developers often may provide public infrastructure or amenities such as parks, affordable housing, or rooftop observatories in exchange for more lenient zoning requirements (Myszewski and Kundell 2005).

Maximum/minimum lot sizes regulate the density of development in order to protect rural land uses and rural character or create conservation areas in subdivisions (Juergensmeyer and Roberts 1998). Some communities use smaller lot sizes and protection of natural areas as an incentive to obtain speedier approvals for development, so that the same effect is obtained voluntarily rather than through zoning or regulation.

Open space/cluster zoning concentrates buildings on part of a property while maintaining greenspace and wildlife habitat on the remainder (Myszewski and Kundell 2005).

Overlay zoning enables a municipality to promote or discourage development in certain areas by supplementing underlying zoning standards with additional requirements that can be designed to protect natural resources. Overlay zoning districts can be positioned "over" the standard zoning for an area in order to customize some of the regulations for that specific area (Myszewski and Kundell 2005, Juergensmeyer and Roberts 1998). For example, overlay zoning may be used to protect historic districts or create greenways.

Performance zoning regulates land uses based on adherence to predetermined criteria, while still allowing for a wide variety of land uses. Impervious surface ratio (ISR) standards are one type of performance zoning. They aim to improve stormwater drainage and protect water quality by specifying how much of a site may be covered with impervious surfaces (Myszewski and Kundell 2005).

Planned unit development (PUD) permits the unified development of entire neighborhoods based on approved plans, which may or may not correspond to the regulations of that particular zoning district. PUDs can promote developer creativity and more efficient use of open space (Myszewski and Kundell 2005, Juergensmeyer and Roberts 1998). A condominium is an example of a PUD.

Rural residential zoning provides an area for nonfarm and nonforestry housing in the countryside, promoting rural community stability without interfering with farm and forestry operations (Daniels 1999).

Steep-slope zoning prohibits construction on steep slopes in order to protect public health and safety, reduce soil erosion, prevent mudslides, reduce stormwater and septic runoff, and preserve views (Daniels 1999).

Summary

These strategies are available in many states to assist with growth management, regional planning, and land conservation. Check with county and regional planners and land trust managers to determine which tools exist in and are best suited to your area, and which have a track record of success.

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