

Conservation Subdivisions Coming to the Panhandle

by Neil Fleckenstein

Native Floridians (and even recent arrivals) are all too familiar with the staggering pace of growth in the Sunshine State. Between 1970 and 2005, an average of 870 new residents arrived daily, so that by 2005, our isthmus paradise was home to an estimated 17.9 million residents. (In the interest of complete disclosure, I joined the club in 1971). Florida now ranks fourth in the U.S. in population and is rapidly gaining on New York to claim the bronze medal. The resulting explosion of residential development has led to the creation of countless subdivisions built upon former farmlands and forestlands.



RANDALL ARENDT

Example of a conventional subdivision design

Looking for alternatives to sprawling growth in the state's remaining rural areas, Representative Randy Johnson (R-Celebration), Chairman of the Florida House Growth Management Committee, recently invited the developers of the Centerville Conservation Community in Leon County to discuss this new conservation subdivision with the committee. In introducing Randall Arendt, one of Centerville's designers, Chairman Johnson noted that Centerville may exemplify "the wave of the future" for rural development in the Florida Panhandle. Given the legislators' interest and the fact that several conservation-based developments are underway in the Panhandle, it seemed timely to offer an overview of this important conservation tool.

So, what is a conservation subdivision?

Conservation subdivisions, also referred to as conservation communities or open space developments, are residential developments in which homes are clustered on smaller lots, allowing a significant amount of the landscape (typically 50 percent or more) to be permanently protected as common greenspace.

In conservation subdivisions, greenspace is NOT an afterthought, the byproduct of having wetlands, steep slopes, or other land that cannot be developed. Rather, protected greenspace is the central organizing principal of the development and the means of protecting the character and integrity of the natu-

ral community. Homes – the same number as in a comparable conventional subdivision – are clustered on smaller lots on a smaller portion of the buildable landscape.

A new twist on an old idea

The idea of designing a community around protected greenspace has a long history in this country. In the 1730s, General James Oglethorpe's plan for Savannah, Georgia, included the creation of the many park squares that remain the signature design element of this vibrant city. In the mid 1800's, the romantically designed suburbs, such as Llewellyn Park in New Jersey and Riverside in Illinois, with their large expanses of land and shared open space, were a response to the crowded, unhealthy conditions in large cities. The Garden City Movement of the 1920s was defined by the creation of planned suburban communities like Radburn in Fairlawn, NJ and Chatham Village in Pittsburgh, PA, which featured expanses of greenspace, pathways, and public gardens (Arendt, 1999a). More recently, the designers of conservation communities like Prairie Crossing in Grayslake, Illinois and Tryon Farm in Michigan City, Indiana, have creatively clustered home sites to conserve a significant portion of greenspace, connecting homeowners to nature while maintaining the ecological integrity of the landscape.



RANDALL ARENDT

Example of a conservation subdivision design

Randall Arendt's work in the 1990s introduced a new generation of planners and developers to the concept of using the natural environment as a centerpiece around which to design housing communities. Arendt popularized the term "conservation subdivision," and identified the ecological and economic benefits of green development (Arendt, 1999a; Arendt, 1996).

Design and use of open space

One of Arendt's innovations was developing a concise, four-step process to guide the design of conservation communities.



Common greenspace in Radburn.

Briefly, the steps are:

1. Identifying *primary conservation areas* that must be protected (wetlands, floodplains, and steep slopes), and *secondary conservation areas* that potentially should be protected to the maximum extent possible (prime farmlands, healthy forests, and scenic, sensitive, or historically significant features);
2. Locating homesites to best take advantage of views of the conservation areas (i.e., creating the most “view lots” possible);
3. Aligning streets and nature trails to best serve homesites while minimizing impacts on the landscape; and
4. Drawing in the lot lines (Arendt, 1996).

Arendt compares the process to designing a golf course community, with protected greenspace replacing the fairways and putting greens. Conservation subdivision regulations often require the protection of at least 50 percent of the site as greenspace. The majority of this greenspace should be buildable land. Some ordinances also require *contiguity* of open space (e.g., 75 percent in a contiguous tract) and *connectivity* to adjoining protected open space. Usage of the protected areas varies according to the design of the community, the interests of homeowners, and restrictions contained in local land development regulations. Potential uses of open space could include passive recreation, small-scale farming, and selective harvest forestry. Ownership and management options also vary, although the open space frequently is dedicated to a homeowners’ association and permanently conserved using a conservation easement, which is typically held by a land trust or local government (Fowler and Wenger, 2001).

Environmental and economic benefits

Environmental benefits – The most important environmental benefit is water quality protection. This derives from several factors including the protection of riparian buffers, waterbodies, wetlands, and

groundwater recharge zones in primary conservation areas; clustering development away from water resources; and reducing impervious surface area, thereby decreasing stormwater runoff by 20 to 60 percent compared to conventional designs (Arendt, 1996; Center for Watershed Protection [CWP], 1998).

The protection of critical habitat in and around watercourses, waterbodies, and wetlands is a second important benefit of conservation design. A third advantage is the protection of upland areas that provide habitat, forage, and green corridors for many species of birds, mammals, and reptiles.

Economic benefits – Buyers are willing to pay more for land adjacent to protected greenspace. Nelson (2004) reports that open space and urban forests “overwhelmingly” affect the price of neighboring properties. Homes in conservation subdivisions, despite smaller lot sizes, can sell for significantly more than those in conventional developments – as much as 33 percent more by some estimates (McMahon & Pawlukiewicz, 2002; Fowler and Wenger, 2001; The Trust for Public Land, 1999; Arendt, 1996; Lacy, 1990). Homes in conservation communities also tend to sell faster (Mohamed, 2006; Arendt, 1996).

Developers also enjoy potential cost savings associated with reduced infrastructure (roads, sidewalks, and utilities) and reduced land preparation costs required by compact conservation designs (Mohamed, 2006; Fowler & Wenger, 2001; Arendt, 1996).



Lake Aldo Leopold at Prairie Crossing.

Limitations of conservation subdivisions

The conservation subdivision is not a panacea. Rather, it is one of several tools that can help to achieve the land conservation and housing goals of a community or region. Conservation design must be used in conjunction with – not as a substitute for – more broad-based tools such as comprehensive growth management plans, agricultural zoning, urban service boundaries, land acquisition, conservation easements, and the transfer of development rights. There are also some critical limitations to keep in mind.

Encouraging sprawl - One persistent criticism of conservation design is that it may actually encourage sprawl – albeit a greener form of sprawl – in formerly undeveloped sites in rural areas. According to Daniels (1997), it can be argued that the role of cluster design is not to conserve farmland and working rural landscapes but rather to protect scenic views and encourage more upper income buyers to move to the countryside.

Since homes in conservation subdivisions are highly marketable, sell for a premium, and appreciate at a greater rate than homes in conventional subdivisions, there is reason to be concerned that these green projects could lead to the premature development of the resources they were designed to conserve.

Inconsistent local ordinances – Local ordinances, which can vary greatly from one community to the next, play a critical role in guiding the design and development of conservation communities and the quality and quantity of conservation land protected. For example, Leon County, Florida requires that conservation subdivisions permanently protect a minimum of 50 percent of a site as open space, while some Georgia communities only require 20 to 25 percent open space. Ordinances with low conservation thresholds may offer little in the way of protecting significant natural features or contributing to the conservation of a larger network of open space.

(Northeastern Illinois Planning Commission and Chicago Wilderness [2003] Fowler and Wenger [2001], and Arendt [1999b] offer several examples of model conservation subdivision ordinances.)

Lack of affordable housing – Since conservation subdivisions typically feature higher end, single-family homes, they often do not address a community's affordable housing needs. (The East Lake Commons conservation community in Atlanta, described elsewhere in this publication, is one exception.)

Conservation subdivisions coming to the Florida Panhandle

The Red Hills region of north Florida and southwest Georgia is truly one of America's unique landscapes. The Nature Conservancy has designated this 300,000-acre region between Tallahassee and Thomasville, Georgia, as "One of America's Last Great Places." The region is home to more than 60 protected plants and animals, the remnants of the great longleaf pine forests of the southeastern United States, large quail hunting plantations, rolling hills, and red clay roads shaded by century oaks. Given the concerns regarding the connection between conservation subdivisions and sprawl, the Tall Timbers Land Conservancy, the largest regional land trust in Florida and Georgia, opposes allowing conservation subdivisions in the heart of the Red Hills region. Tall Timbers' concern is the fragmentation of the region's natural resources and the impact that would have on conservation efforts in the Red Hills. Tall

Timbers supports allowing conservation communities in urban fringe areas as a transition between urban and rural landscapes. In these areas, homes can easily be clustered, conserving greenspace to buffer developed areas and working rural lands.

Several conservation-based developments are now underway in the Panhandle. One of these is the Centerville Conservation Community in

Tallahassee. Centerville is located on the southern periphery of the Red Hills region, where conservation easements, public acquisition, and deeds of covenant currently protect more than 135,000 of the region's 300,000 acres. In Centerville, 200 homes will be clustered on approximately 350 acres of land in the urban fringe zoning category, which typically requires three-acre lots. Approximately 65 percent of the 975-acre site will be permanently conserved in a conservation easement. This includes significant upland acreage set aside to protect the gopher tortoise (a species of special concern in Florida). Residents will be able to share extensive nature trails, two miles of scenic pedestrian walkways, stocked fishing ponds, and horse stables.

“Laying out a conservation community is a form of art.”



One of several ponds at Centerville Conservation Community.

Crucial to protecting Centerville’s unique landscape is its land management plan, which calls for the use of prescribed fire. Landowners throughout the Red Hills use this natural land management tool to maintain the health of the ecosystem and reduce the risk of wildfire. Centerville’s land management plan also requires the planting of native plants, shrubs, and trees, including the restoration of longleaf pine and wiregrass.

Centerville’s managing partner Jon Kohler says, “Designing with nature in mind is not easy. Laying out a conservation community is a form of art, and many engineers are not artists.”

The public’s response to the Centerville Conservation Community has been overwhelmingly positive. More than half the lots sold within days of the initial public offering. Residents of nearby neighborhoods, initially skeptical about traffic and smaller lot sizes, have become supporters of Centerville, citing Kohler’s willingness to address their concerns and his



ELIZABETH BARRON

Prescribed fire helps maintain a healthy forest at Centerville.

desire to protect the integrity of the landscape. Even so, Kohler describes Centerville’s path from concept to approval as an arduous journey. Staff from the Leon County Department of Growth and Environmental Management (GEM) attribute the lengthy process to several factors. Since it was the first conservation community in Leon County, there was a steep learning curve for all involved. In addition, when Centerville was first proposed, Leon County had not yet adopted a conservation subdivision ordinance to guide the review of such developments. Finally, this complex project required future land use map and zoning changes before site planning and permitting could even begin.

Notable conservation subdivisions outside Florida

Florida is not the only state facing difficult issues regarding conservation and housing. Three examples of conservation communities that have successfully blended conservation and residential development are Prairie Crossing, Tryon Farm, and East Lake Commons. Prairie Crossing (www.prairiecrossing.com), one hour north of Chicago in Grayslake, Illinois is one of the most well known conservation communities in the nation, known for its successful restoration of native prairie and

wetland systems as well as its mixed-use, pedestrian friendly design. On its 670-acre site, Prairie Crossing features hundreds of acres of conservation lands as well as a mixture of energy efficient, single-family homes and condominiums, shops and restaurants, an organic farm, farmer’s market, and charter elementary school. A rail line (with two on-site stations) connects Prairie Crossing to the Chicago metropolitan area.



TOM FORMAN

Protected farmland at Tryon Farm.

Tryon Farm (www.tryon-farm.com) in Michigan City, Indiana is located on a century-old dairy farm operated by the fourth generation of a family that has lived at the farm since the late 1800s. This 170-acre conservation community boasts restored native prairie and wetland systems, and includes a variety of housing types, sizes, and prices. Like Prairie Crossing, Tryon Farm is linked to the Chicago metropolitan area by rail.

East Lake Commons (www.eastlakecommons.org) is a unique conservation community. Small at just 20 acres, and located within four miles of downtown Atlanta, it is a mixed income conservation community with a range of housing prices. Sixty-seven homes are clustered on approximately eight acres, with additional land reserved for an organic farm and community open space, all within Atlanta’s urban core. Recognizing that East Lake Commons is an important part of the local community, the residents sponsor and host a summer camp for



NEIL FLECKENSTEIN

East Lake Commons’ organic farm.

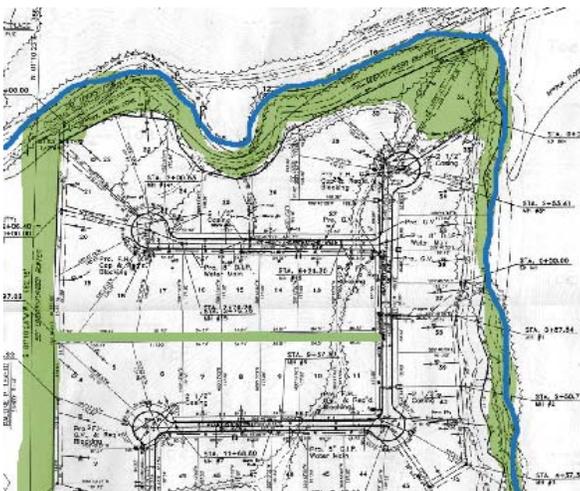
children from East Lake Commons as well as the surrounding low to moderate income neighborhood. The East Lake Commons conservation community was the winner of the American Institute of Architect's 2001 Housing and Community Design Award and the 2000 World Habitat Award.

Recommendations for those considering conservation subdivisions

A conservation subdivision can be a useful tool, combining both land conservation and residential development; however, it is not a panacea capable of meeting all of a community's conservation and housing needs. Rather, it should be one element in a comprehensive land conservation program that identifies areas most appropriate for growth and those best suited for conservation. The author offers the following recommendations to local officials who are considering adding conservation subdivisions to the mix of conservation tools in their communities:

- Limit conservation subdivisions to urban fringe areas as a transition between urban and rural landscapes. Consider how the marketability of conservation subdivisions may lead to the premature conversion of rural landscapes.
- Consider using conservation easements, agricultural zoning, urban service boundaries, and compact design to protect productive farmland and distinctive rural landscapes. In many cases, these are more appropriate tools than conservation subdivision design.
- Besides requiring the protection of a minimum percentage of open space (typically 50 percent or higher), ensure that conservation subdivision ordinances also identify a minimum percentage of *developable land* to be conserved. Some ordinances require that 50 percent or more of the protected open space consist of land that is suitable for building.

- Encourage creative conservation community design, for example, by providing design flexibility in minimum lot sizes, lot configurations, and building setbacks.
- Have a good land management plan. The development *and* implementation of the land management plan is crucial to ensuring the stewardship of protected open space.
- Consider offering appropriate incentives to encourage the development of conservation communities instead of traditional subdivisions. Incentives could include: a faster and more predictable approval process for conservation subdivisions; reduced development fees; and small density bonuses for dedicating open space and trails for public usage or for providing affordable housing.
- Make use of low-impact development techniques in conservation communities. Such techniques might include bioretention areas, vegetated swales, permeable pavement materials, and flexible design standards for roads, parking lots, driveways, and sidewalks. Helpful organizations for learning about low impact development techniques include the Center for Watershed Protection www.cwp.org and the Low Impact Development Center www.lowimpactdevelopment.org.



Conservation subdivision with limited green space.



Vegetated swales reduce stormwater and decrease infrastructure costs.

Liz French

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