



# STREAMLINES

A Newsletter for North Carolina Water Supply Watershed Administrators

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## New Urbanism and Water Quality

For the past fifty years, much development in the United States has taken the form of suburban sprawl with isolated tract house subdivisions, increasingly congested highways lined by strip retail, and shopping centers and office parks surrounded by large parking lots. While there is nothing explicitly wrong with this kind of development, many Americans are beginning to express their unhappiness in phrases like "no sense of place" and "the loss of community."

How can a new community be designed to foster a friendly, stimulating social atmosphere? How can streets and public areas become inviting enough that people will want to spend time in them? Can a pleasing visual order which conveniently supplies inhabitants' daily needs be attained while also managing the natural environment with respect and intelligence?

To address these concerns, a small but rapidly growing number of American designers, developers, and towns are rejecting the dominant modern methods of creating new residential areas and returning to the town-planning traditions of the early twentieth century and before. Embracing this "new traditionalism," today's designers are increasingly influenced by the grid plans, narrow streets, intimate scale, and convenient shopping of nineteenth-century American towns.

### What is New Urbanism?

There are many ways to express the concepts of new urbanism (e.g., neotraditionalism, transit-oriented development, or pedestrian-oriented design) which are often used interchangeably. The basic idea is to create cities built to a human scale, where people can walk to a variety of destinations, and where there is a sense of community. The focus is on the neighborhood which is limited in size, cohesive, mixed-use, cognizant of its history, and tied to a distinct geographic location.

### Each Area is Unique

New urbanists assert that current zoning and market-driven development leads to segregated, auto-dependent land uses resulting in a sprawling landscape which takes on the same form regardless of location. To build community, we must recognize that each region, each town, each neighborhood has its own attributes -- topography, climate, flora, fauna, and history -- which should be reflected in local development plans and architecture.

Similarly, each building site also has its own natural terrain and site characteristics that should influence its final layout and development. A generic project plan, no matter how pedestrian-oriented or well-refined, will not work for every possible development. The result would be counterproductive: replacing conventional sprawl with high-density, neo-traditional sprawl. It makes sense to assess the site before deciding on the shape and form of the

development. Local residents are excellent resources and often know best what is most appropriate for their own community.

## Can New Urbanism help mitigate water quality impacts?

New urbanism embraces a holistic philosophy that places strong emphasis on designing at a local, human scale to fit the natural surroundings. Contemporary development too often applies a "cookie cutter" approach to the planning of new subdivisions resulting in buildings and streets which are not necessarily tailored to the landscape.

Neotraditionalists, on the other hand, can get caught up in frontage design and street profiles while losing track of the overall project perspective. In order to best preserve water quality, site-specific techniques such as [clustering](#), infill development, density averaging, and proper [open space preservation](#) should be used after a careful analysis of existing conditions. The impact to the overall landscape must always be evaluated during the planning and construction phases.

### [Cluster Development](#)

Clustering is an alternative to conventional design which can lead to a more livable and less environmentally impacting method of land development. Decreased minimum lot sizes, street widths, and setback requirements allow buildings -- and their associated [impervious surfaces](#) -- to be placed closer together and away from naturally sensitive features. More space is then available for parks, greenways, [buffers](#), and wildlife habitat which should generally be located downstream and adjacent to creeks and streams.

### **Infill Development**

In order to build upon the community identity, it is important to link with or reinforce the existing place, to complement what's already there. Most towns already have an existing downtown with a substantial investment in infrastructure. It is likely that much of this central area is covered with parking lots and other impervious surfaces. In order to encourage a more compact, manageable downtown, and to make use of surfaces that are already [built-upon](#), it makes good sense to focus some new development into the historical town center. The state watershed rules exempt existing development from [impervious cover](#) calculations, so this land is often available as a "bonus."

### **Density Averaging**

Obviously there will always be areas within a community that are unfeasible or undesirable for development of any kind. Flood plain areas, steep slopes, and watershed protection buffers are good examples of these areas. There is a provision in the watershed rules which allows for density averaging throughout the watershed. By agreeing to set aside certain areas which are deemed important for water quality protection, jurisdictions can transfer those development rights to another parcel which is more appropriate for construction. When managed properly, this kind of a system can increase densities in the community center while protecting natural resources.

### [Open Space Preservation](#)

Neotraditionalism encourages a compact, walkable style of development. Apartments are placed above downtown commercial space; streets are narrowed; suburban lots are clustered; useless front lawns may be eliminated. New urbanism compensates for this "loss of privacy"

by providing squares, parks, greens, and other useful, high quality civic amenities. By looking at a site within the context of the community as a whole, the land that is most appropriate for conservation can be set aside and preserved while concentrating development in another area. This land, when sited properly, can be used as a buffer area to filter out non-point source pollution travelling from the built-upon areas to the creeks and rivers.

## How to do New Urbanism

### **The Five-Minute Popsicle Rule**

"Neighborhoods should be laid out in such a manner that children can walk or bike by themselves to the corner store to get a popsicle in five minutes or less." -- Dr. Terry Kahn, The University of Texas at Austin.

The knowledge and skills are available to return humanity, beauty, and community to our neighborhoods, towns, and cities. Getting past preconceptions and existing zoning codes may be the most difficult steps along the way. Here are some guidelines for implementing new urbanist techniques in development:

1. *Respect the land.* Let the natural land patterns dictate the location of buildings, streets, and open space, rather than imposing a predetermined solution.
2. *Create usable, pedestrian-friendly spaces.* Strive for public areas (e.g., an old-fashioned downtown, a town square, a neighborhood park or greenway) where neighbors can gather for events, walk their dogs, and generally meet each other during the day.
3. *Put people first, not cars.* Of course, Americans love their cars, and they are a necessary part of daily life; but they shouldn't dominate the landscape. Communities should have neighborhood-scaled streets, not thoroughfares. Promote continuity by eliminating dead-ends and cul-de-sacs. Narrower streets and on-street parking enhance pedestrian safety by slowing down cars.
4. *Promote a mixture of uses.* By integrating rather than separating urban elements, it is possible to create a more compact, urbane, walkable community, with shopping and employment close to housing. Mixed use may be a way to create "new" land through infill without losing open space or straining community services. A variety of housing types and prices allows people of different incomes and ages to live close to each other and to remain in the community by upgrading from rental housing to home ownership.

### **Real examples of New Urbanism:**

- [Seaside](#) (Florida Panhandle near Panama City, FL)
- [Celebration](#) (S. of DisneyWorld, near Orlando, FL)
- Harbor Center / Windsor (near Vero Beach, FL)
- Mashpee Commons (near Hyannis, Cape Cod, MA)
- Kentlands (Gaithersburg, Montgomery County, MD)
- [Southern Village](#) (Chapel Hill, NC)
- Various Towns surrounding the City of Charlotte, NC (e.g., Belmont, Cornelius, Davidson, Huntersville, Locust)
- Riverfront (South of Manchester, New Hampshire)

- Friday Mountain (Oak Hill, southwest of Austin, TX)
- Blount Springs (North of Birmingham, Alabama)
- Town Center -- Reston, VA (W. of Washington, D.C.)

## Conclusions

Despite several rapidly urbanizing areas, the state of North Carolina is unique in that its pattern of development is composed of numerous small or "small-feeling" towns. Anyone who has lived in, or visited this state can appreciate the immense natural beauty and amenities that are available here. But with the quantity, pace, and type of new growth and development that is occurring around the state -- especially in the Charlotte, Piedmont Triad, and Research Triangle areas, it is debatable whether the quality of life to which most North Carolinians have grown accustomed can be maintained for future generations.

Most people would agree that economic growth is a desirable goal, so long as it occurs in a quality manner. Neotraditionalism represents an attempt by architects, planners, academicians, and developers to create this kind of quality new growth by looking at what has worked well in the past. To implement these ideas, New Urbanism promotes the adoption of pedestrian orientation, human scale, and mixed uses as priorities in building and designing new developments.

Some may say that times have changed and that nostalgia for a simpler form of building is counterproductive. But the success of neotraditional developments which have been constructed over the last several years may be signalling a shift in what current and future residents of a community desire in the way of new construction.

In addition, New Urbanism offers significant promise in the protection of water quality and natural resources in general. Neotraditionalism appears to form a natural fit with the ideas of clustering, infill development, density averaging, and open space preservation. The North Carolina [Water Supply Watershed Protection](#) Rules provide the flexibility and the framework for local municipalities to implement new urbanist style development if desired. Progressive localities may want to experiment with new urbanism when planning for their local communities.

## Resources

The following publications are highly recommended for those seeking additional information regarding new urbanism and related issues:

- Arendt, Randall et al. *Rural by Design*. APA Planners Press, 1994.
- Arendt, Randall. "Creating Open Space Networks," *Environment & Development*. American Planning Association, May/June 1996.
- Calthorpe, Peter. *The Next American Metropolis*. Princeton (NJ) Architectural Press, 1993.
- [Congress of the New Urbanism \(CNU\) web site](#) at the University of Miami.
- Jacobs, Jane. *The Life and Death of Great American Cities*. Vintage Books (Random House), 1961.
- Katz, Peter. *The New Urbanism*. McGraw-Hill, 1993.

- Kunstler, James Howard. *The Geography of Nowhere*. Simon & Schuster, 1993.
- [Kunstler, James Howard. "Home from Nowhere," \*Atlantic Monthly\*, September 1996.](#)
- Langdon, Philip. *A Better Place to Live*. Harper Collins, 1995.
- Oldenburg, Ray. *The Great Good Place*. Paragon House, 1989.
- Vitek, William. "New Urbanism: Building Community," *The Denver Post*. September 15, 1996.

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