MEMORANDUM

TO: DENR Division Directors

FROM: Bill Holman

RE: Smart Growth/Cumulative and Secondary Impacts

DATE: January 5, 2001

Increasingly, DENR staff must consider the secondary and cumulative effects of proposed projects in issuing permits and in reviewing environmental documents under the North Carolina Environmental Policy Act and the National Environmental Policy Act (NEPA). Some of the statutes governing our permitting programs, such as the Coastal Area Management Act, direct the Department to consider those indirect impacts in making a permit decision. Many secondary and cumulative effects have to do with increased growth and development that may result from the project under review – whether it is a proposed wastewater treatment plant, a highway or a major industrial facility. As DENR programs have been directed to address cumulative and secondary impacts in decision-making, the State has also begun to focus more attention generally on smart growth and sustainability. Protecting, maintaining, and restoring North Carolina’s high quality of life is essential to both North Carolina’s environmental and economic health.

To assist both DENR staff and project planners, DENR has summarized in this document some of the goals of the Department with respect to use of open space, regionalization and other planning tools. These principles also reflect the mitigation measures most often recommended by our natural resource agencies as necessary to protect fish and wildlife habitat and rare, threatened and endangered species. Many of these recommendations are consistent with the draft recommendations of the Legislative Commission To Address Smart Growth, Growth Management And Development Issues. To the extent allowed under existing statutes and rules, I encourage DENR staff to consider these guiding principles and resource conservation recommendations when reviewing and commenting on environmental documents. Following these principles is a resource list identifying other materials that provide useful guidelines for planning.
DENR WORKING PRINCIPLES TO ENCOURAGE SMART GROWTH, TO AVOID, MINIMIZE AND MITIGATE DIRECT, SECONDARY AND CUMULATIVE IMPACTS, AND TO PROTECT AIR, WATER AND NATURAL RESOURCES

Open Space

- DENR supports the statutory goal of preserving one million acres of open space over the next ten years as provided in GS 113A-240.
- DENR supports expanding and connecting the system of state parks, state forests, state gamelands, state trails, state natural areas, local parks, local trails, local greenways, national parks, national seashores, national forests, and national wildlife refuges.
- DENR encourages local governments and project planners to maintain connected wildlife corridors linking existing parks, refuges and buffers and make protection of rare, threatened and endangered species a consideration in acquisition of open space.
- DENR supports private stewardship and conservation of farmland and forestland.
- DENR encourages the maintenance of at least 20% of the land in new residential and commercial developments as open space consistent with the Division of Community Assistance guidelines for redevelopment of areas affected by Hurricane Floyd. (Under Resources, see Subdivision Design Standards for State Crisis Housing Infrastructure Funds.)
- DENR supports local acquisition of conservation easements for greenways in conjunction with acquisition of easements for sewer lines along streams.

Brownfields

- DENR supports remediation and redevelopment of previously contaminated sites (or “brownfields”) in urban areas to encourage compact development in cities and towns and to discourage sprawl.

Floodplains, buffers and wetlands

- DENR supports state and local policies to discourage inappropriate industrial, commercial, and residential development in 100-year floodplains. Facilities that use or store hazardous materials and wastes should not be located in the 100-year floodplain. See the Flood Hazard Prevention Act of 2000, GS 143-215.51.
- Filling in floodplains should be mitigated to prevent increased risk of flooding.
- DENR supports protection and restoration of forested riparian buffers on all intermittent and perennial streams. DENR recommends the 50-foot buffer rules adopted by the Environmental Management Commission in the Neuse and Tar-Pamlico River Basins as a model for buffers designed to protect and restore water quality. Destruction of riparian buffers should be mitigated.
- DENR supports conservation and restoration of wetlands in order to protect and restore water quality, to provide wildlife habitat, and to store flood waters. Destruction of wetlands should be mitigated.
Water Supply Infrastructure

- DENR supports local, regional and state policies to prevent and reduce contamination of surface and underground drinking water supplies.
- DENR discourages inappropriate industrial, commercial, and residential development in water supply watersheds and in wellhead protection areas.
- DENR encourages the incorporation of water reuse (or industrial and other non-drinking water purposes) into the development of new water supply infrastructure projects.

Regionalism

- DENR supports consolidation and regionalization of public services such as drinking water treatment, distribution, and conservation; wastewater collection, treatment and reuse; stormwater collection and treatment; and reduction, reuse, recycling and disposal of solid waste.
- DENR supports integration of transportation, air quality, and land use planning at the regional level.
- DENR supports local and regional open space planning; the Yadkin/Peedee Lake plan is an example of that kind of regional planning for open space and recreational use.
- DENR supports giving priority for funding to planning and infrastructure projects designed to address regional needs.

Public Access

- DENR supports public access to public beaches, waters, parks, forests, gamelands, and trails.

Transportation

- DENR supports transportation projects and plans that reduce air pollution and vehicle miles traveled. Planning for public transit and the incorporation of sidewalks and bicycle lanes into street and highway projects offer other ways to reduce pollution and make our transportation system more efficient. DENR also supports incorporation of access controls into the planning of new highway projects as another approach that is consistent with smart growth principles.
- DENR encourages subdivision design that limits use of cul de sacs and encourages use of connector streets. DENR supports the Department of Transportation’s Traditional Neighborhood Development Guidelines adopted in August, 2000.
- DENR encourages mixed use development to decrease vehicle miles traveled.

Land Use Planning

- DENR encourages the use of local land use plans and watershed plans to guide development away from important natural resources, critical habitat, and hazard areas.
• DENR recommends development of local land use plans that are consistent with the Environmental Management Commission’s river basin plans.
• DENR supports in-fill development to make the best use of existing infrastructure.
• DENR supports clustering of new development to avoid unnecessary fragmentation of open space and wildlife habitat.
• DENR supports a dedicated source of funding for wastewater, drinking water, stormwater and other infrastructure projects. DENR also supports linking the state funding of infrastructure projects to development of and compliance with local land use plans.

Smart Growth Resources

Land Use Planning

Subdivision Design Standards for State Crisis Housing Infrastructure Funds
(from: http://www.nccommerce.com/recovery/programs/sub.asp)
City Subdivisions:

Minimum:

Subdivisions must be located in or near an existing community, and must be served by public water and sewer. Streets must provide interconnections within the subdivision, connect to a public street and meet NCDOT or municipal standards. Cul de sacs serve fewer than 16 lots. Subdivisions must provide open space which protects sensitive portions of the site and provides areas for common use or natural features. The open space may be deeded to the public if feasible, owned and managed by a home owners’ association or preserved by perpetual easement. Clustering of lots is encouraged to provide open space. Undisturbed buffers of 30 feet must be maintained on perennial streams.

Preferred:

Preference shall be given to infrastructure projects that meet the following higher design standards:

- subdivisions with greater than 5 acres shall dedicate a minimum of 20% of the gross land area in the subdivision as open space;
- undisturbed buffers of 50 feet are maintained on perennial and intermittent streams except as required by the construction of utilities and roads;
- water and waste water lines extend less than 2500 feet from existing lines;
- subdivision provides an interconnecting pattern of streets with constructed connection to adjoining properties;
cul de sacs serve fewer than 8 lots;
sidewalks four feet wide are provided on one side of all streets
except for cul de sacs.

Rural Subdivisions:

For subdivisions located in areas which are designated to remain rural and are not
located in municipal planning jurisdictions, planned sewer service areas and
municipal growth boundaries, the following rural subdivision criteria shall apply.
Streets shall be public and constructed to NCDOT standards, provide interconnectivity
and connection to developable adjoining properties. Cul de sacs shall serve fewer
than 16 lots. Public water shall serve all lots. Fifty foot undisturbed buffers shall be
maintained along perennial streams except as required by the construction of utilities
and roads.

Open Space and Public Access

• Draft recommendations of the Farmland and Open Space Work Group of the
  Legislative Commission To Address Smart Growth, Growth Management And
  Development Issues.

Brownfields

• Draft recommendations of the Community and Downtown Vitality Work Group of
  the Legislative Commission To Address Smart Growth, Growth Management And
  Development Issues.

Transportation

• Draft recommendations of the Transportation Work Group of the Legislative
  Commission To Address Smart Growth, Growth Management And Development
  Issues.
• Department of Transportation Traditional Neighborhood Development Guidelines
  adopted in August, 2000. Guidelines can be accessed at: