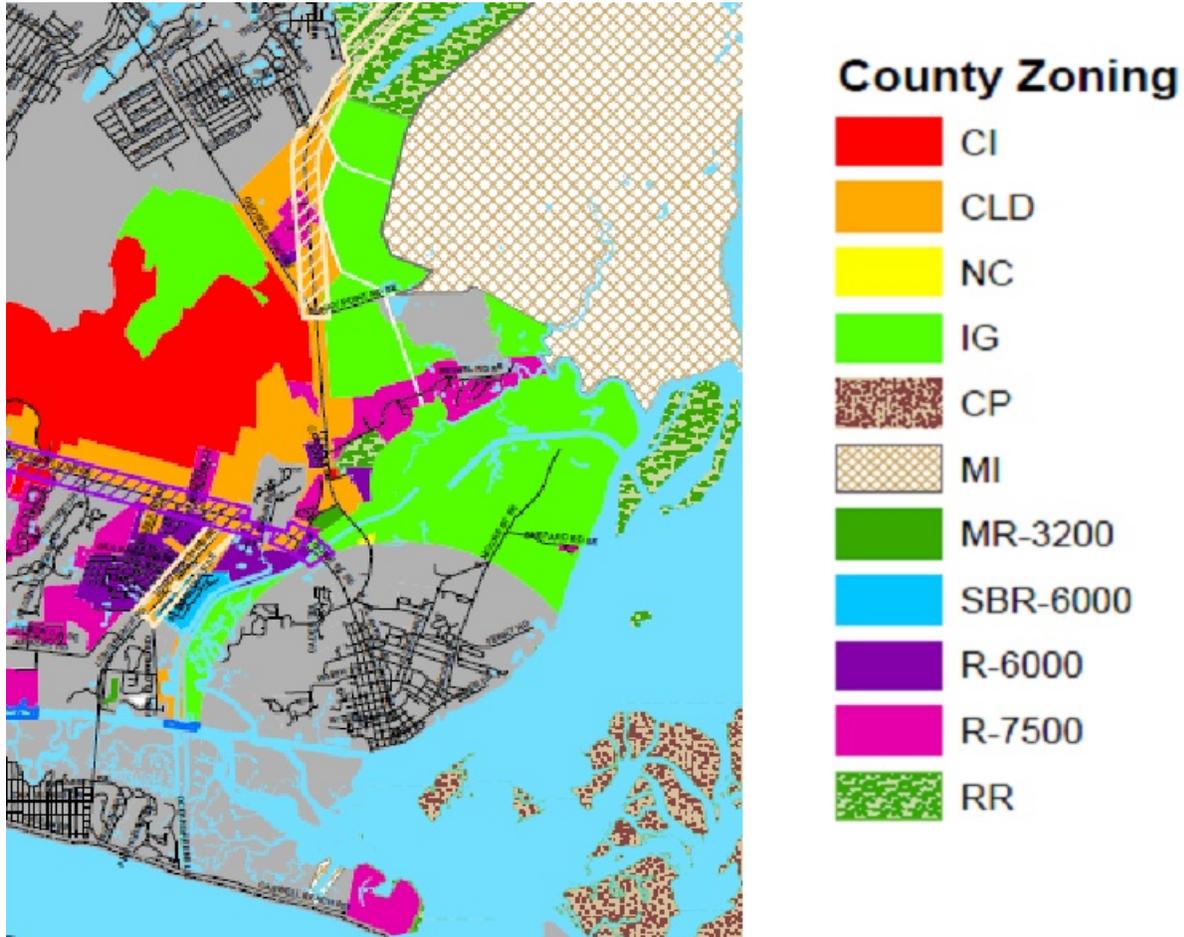


## The Brunswick Industrial Zone

The land use plan adopted for Brunswick County in 2007 designates a very large area surrounding the City of Southport and extending north and west as I-G, *Industrial-General*. This zoning classification is for heavy industry. The map below shows that zone (disingenuously colored green).



This map shows an astonishing array of incompatible adjoining land uses. The industrial zone nearly surrounds a large residential area along Walden Creek, accessed by Bethel Road (purple area, R-7500, center of map), and completely surrounds a smaller area (also purple, R-7500) near the river. The Smithville Township park (mottled green, RR, center of map) adjoins the industrial zone. The campus of the high school and middle school is across NC 87 from the industrial zone.

The industrial zone is largely wooded and undeveloped at this time. However, there is a 1,875 megawatt nuclear power plant located almost exactly in the middle of the map. The canal for the intake of cooling water extends from the Cape Fear River (on the right) to the

reactors, and another canal leading south discharges the heated water. The property on which the plant is located is large, however, so there is a substantial buffer for adjoining properties.

The site purchased by the North Carolina State Ports Authority for the proposed North Carolina International Terminal, a very large marine container terminal, is a 600-acre undeveloped property on the eastern edge of the industrial zone along the river just below the cooling water intake canal. The site is on both sides of the end of East Moore Street (the black line running north by northeast from the City of Southport, the gray area with the circular border). Between that site and the City of Southport lies a citric acid plant and related coal-fired cogeneration plant. The site of the citric acid plant includes a lighthouse built in 1851.

The large cross-hatched area, designated MI (military) is the Military Ocean Terminal at Sunny Point, an ammunition transshipment facility.

### ***Permitted Uses***

This is the description of the *Industrial-General* zoning classification from the Brunswick County Unified Development Ordinance:

#### **I-G: Industrial-General**

The I-G District is intended to provide locations for enterprises engaged in a broad range of manufacturing, processing, creating, repairing, renovating, painting, cleaning, or assembly of goods, merchandise or equipment. Lands in this District are to be located on or near Major Thoroughfares as identified in the Major Thoroughfare Plan or Cooperative Transportation Plan; to rail service; and to in-place infrastructure such as water, sewer, and/or natural gas.

The Unified Development Ordinance provides that whatever is not specifically permitted is prohibited.

The table on the following page shows the uses permitted in industrial zones.

## 5.1.6. Industrial Uses

### A. Heavy Industrial

<b>HEAVY INDUSTRIAL</b>		
<p><b>Characteristics:</b> Firms involved in research and development activities without light fabrication and assembly operations; limited industrial/manufacturing activities. The uses emphasize industrial businesses, and sale of heavier equipment. Factory production and industrial yards are located here. Sales to general public limited.</p>		
<b>Principal Uses</b>	<b>Accessory Uses</b>	<b>Uses Not included</b>
<p>Animal processing, fats and oils, packing, treating, and storage, livestock slaughtering, canned, cured, or frozen fish</p> <p>Asphalt plant</p> <p>Commercial feed lots</p> <p>Concrete, cut stone, and clay products manufacturing plant</p> <p>Energy generating facility</p> <p>Furniture manufacturing and woodworking facilities</p> <p>Hazardous or low-level nuclear material disposal</p> <p>Heavy construction contractors operations</p> <p>Heavy equipment repair</p> <p>Livestock slaughtering</p> <p>Manufacture of aircraft and aircraft parts, boats, yachts, and ships, small arms ammunition, animal feeds, including dog and cat, alcoholic beverage products, asbestos, abrasive, or related products, batteries, floor coverings other than carpet,</p> <p>Metal coating and engraving</p> <p>Motor vehicle assembly</p> <p>Paper products, coating and laminating, pulp and paper mills</p> <p>Petroleum and related products, tires and inner tubes</p> <p>Processing of food and related products</p> <p>Production of chemical, paints, and allied products, rubber, leather and tanning, clay, bone, plastic, stone, or glass materials or products, production or fabrication of metals or metal products including coating, enameling, engraving, and galvanizing, sawmill or planing mill</p> <p>Railroad freight yard</p> <p>Sale of farm equipment and machinery and earth moving and heavy construction equipment</p> <p>Surface active agents</p> <p>Tobacco products</p> <p>Wood products other than containers</p> <p>Wrecking, junk or salvage yard (including vehicle or mobile home salvage), major demolition debris landfill, scrap and waste industries</p>	<p>Associated offices</p> <p>Cafeteria</p> <p>Product repair</p> <p>Repackaging of goods</p> <p>Warehouse, storage</p>	<p>Animal waste processing (see Waste-Related Service)</p> <p>Repair and service of motor vehicles, motorcycles, RVs, boats, and light and medium trucks (see Vehicle Sales and Service)</p> <p>Store selling, leasing, or renting consumer, house, and business goods (see Retail Sales and Service)</p>

## *The Land Use Plan*

The industrial classification of this large area on the edge of the City of Southport raises the question of the integrity of the land use planning process in Brunswick County, or even the existence of such a process.

Yet there is a land use plan, the *Brunswick County CAMA Core Land Use Plan*, adopted by the County in 2007. This is a comprehensive plan, prepared in a workmanlike manner by Holland Consulting Planners, Inc., of Wilmington, in accordance with the requirements of the North Carolina Coastal Area Management Act. The plan, as mandated by the act, includes an analysis of existing and emerging conditions, and a plan for the future.

The preparation of the plan began with a survey of key issues confronting the county. Protection of the natural environment and responsible managed growth were among the highest priorities expressed by survey respondents. Expansion of employment opportunities was near the bottom of the list.

The land use plan includes a mission statement for the County, with these elements (among others):

Brunswick County shall seek to preserve and enhance its natural and human resources. The County will plan for and accommodate future growth while simultaneously maintaining the quality of life for current and future residents. Brunswick County will pursue accomplishment of the following mission statements:

- Set high standards for responsible, well managed growth, and guide development patterns through comprehensive planning and community involvement .
- Preserve and protect our natural and man-made environment for present and future generations.

Some excerpts from the plan document:

### *Environment*

In coastal North Carolina, fragile areas are considered to include coastal wetlands, ocean beaches and shorelines, public trust waters, natural resource fragile areas ... . Maritime forests and outstanding recourse waters should also be considered fragile areas. Brunswick County Areas of Environmental Concern include estuarine waters ... (page 48).

The estuarine system consists of deep water subtidal habitats and adjacent tidal wetlands that are semi-enclosed by land but have open, partly obstructed or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. ... Along some low-energy coastlines there is appreciable dilution of sea water, which is the situation at the mouth of the Cape Fear River. These sheltered waters support an abundance and diversity of plant and animal life, including marine mammals, shore birds, fish, crabs, clams and other shellfish, and reptiles. A number of marine organisms, including many of the commercially valuable fish species, depend on the estuaries for spawning, nursing, and feeding.

Development along estuarine shorelines can exacerbate water quality problems with estuarine waters.

*Note: The site of the proposed container terminal along the Cape Fear River has approximately 100 acres of estuarine wetlands. Another 300 acres of the site is designated by the Brunswick County Tax Assessor as “marsh.”*

The County is an environmentally rich area (page 49).

#### *Industry*

The proximity of Sunny Point and Progress Energy to urbanized areas is a significant land use conflict (page 95).

*Note: “Sunny Point” is the Military Ocean Terminal at Sunny Point, the cross-hatched area on the County Zoning map designated “MI.” This is a facility for the shipment of ammunition.*

*“Progress Energy” is the Brunswick Nuclear Plant, a nuclear electric generating facility. It is located in the industrial zone immediately to the west of the North Carolina State Ports Authority Property, and because of the cooling water canals drawing water from the Cape Fear River and discharging into the ocean, surrounds the City of Southport.*

There is a threat within Brunswick County that future growth will infringe upon Significant Natural Heritage Areas, or other environmentally sensitive portions of the County. These areas are widespread in Brunswick County... . Protection of these areas in a time of such substantial development pressure is imperative (page 95).

Overall, land in Brunswick County is predominantly unsuitable for development (page 105).

It is anticipated that future industrial development will be concentrated in the northern one-third of the County along the US17 corridor. Care should be taken to prohibit/ limit conflicts with adjacent growth. Most industrial growth should be located in existing or future industrial parks(section 6, page 3).

The major industrial development should occur west of Leland and south-southwest of Belville (section 6, page 3).

### *Recreation and Parks*

According to National Recreation Standards, the County's future demands include an increase in baseball fields, softball fields, practice fields, youth baseball fields, tennis courts, basketball goals, football/soccer fields, and swimming facilities.

The County completed a Parks and Recreation Master Plan that was adopted on January 15, 2002. ... The plan identified several significant deficiencies with regards to parks and recreation facilities and services throughout the County. The most significant issues defined in the plan are the need for additional land acquisition, facility development, program development, policy considerations, and personnel considerations.

### *Policies*

Brunswick County and its participating municipalities will ensure that development and use of resources or preservation of land minimize direct and secondary environmental impacts; avoid risks to public health, safety, and welfare; and are consistent with the capability of the land based on the land suitability analysis map (section 6, page 25).

Brunswick County will encourage/support the development of clean industries in locations where services can be provided, environmental impacts can be mitigated, surrounding land uses are compatible, and transportation systems can support the development (section 6, page 30).

Brunswick County will preserve/protect wetlands and swamps from development pressures (section 6, page 32).

Brunswick County supports reuse of existing/abandoned commercial and industrial sites to increase valuable open space (section 6, page 32).

Brunswick County is one of the most biologically diverse areas in the State of North Carolina. The County shall take no action nor approve of

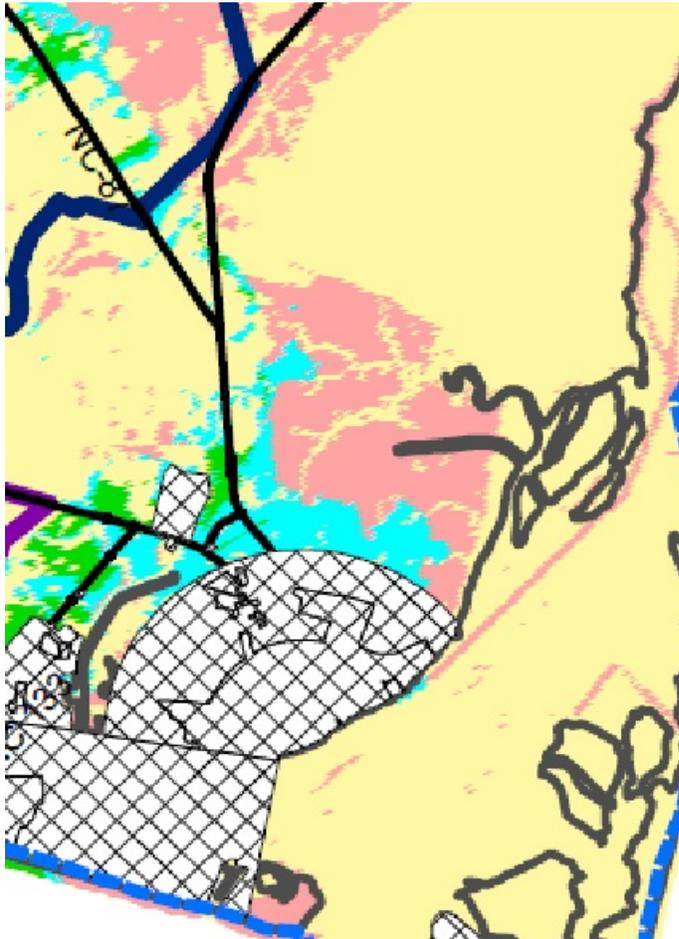
any action which would seriously or irreparably harm the long-term biodiversity and productivity of the area (section 6, page 33).

Brunswick County does not support new development and redevelopment activities which would significantly degrade the quality of natural and scenic resources in Brunswick County, prematurely diminish the predominantly rural character of the area, or create incompatibilities of scale, design or land use, ... (section 6, page 33).

Despite these statements and pages and pages of similar statement of policy, the final land use map appearing at the end of the report presents the paradox of permitting the most noxious and destructive uses possible in the most sensitive areas of the County.

### *The Land Suitability Analysis*

An element of the County land use plan is a an analysis “to assess where land is most and least suitable for development of structures and infrastructure.” The process produced this map:



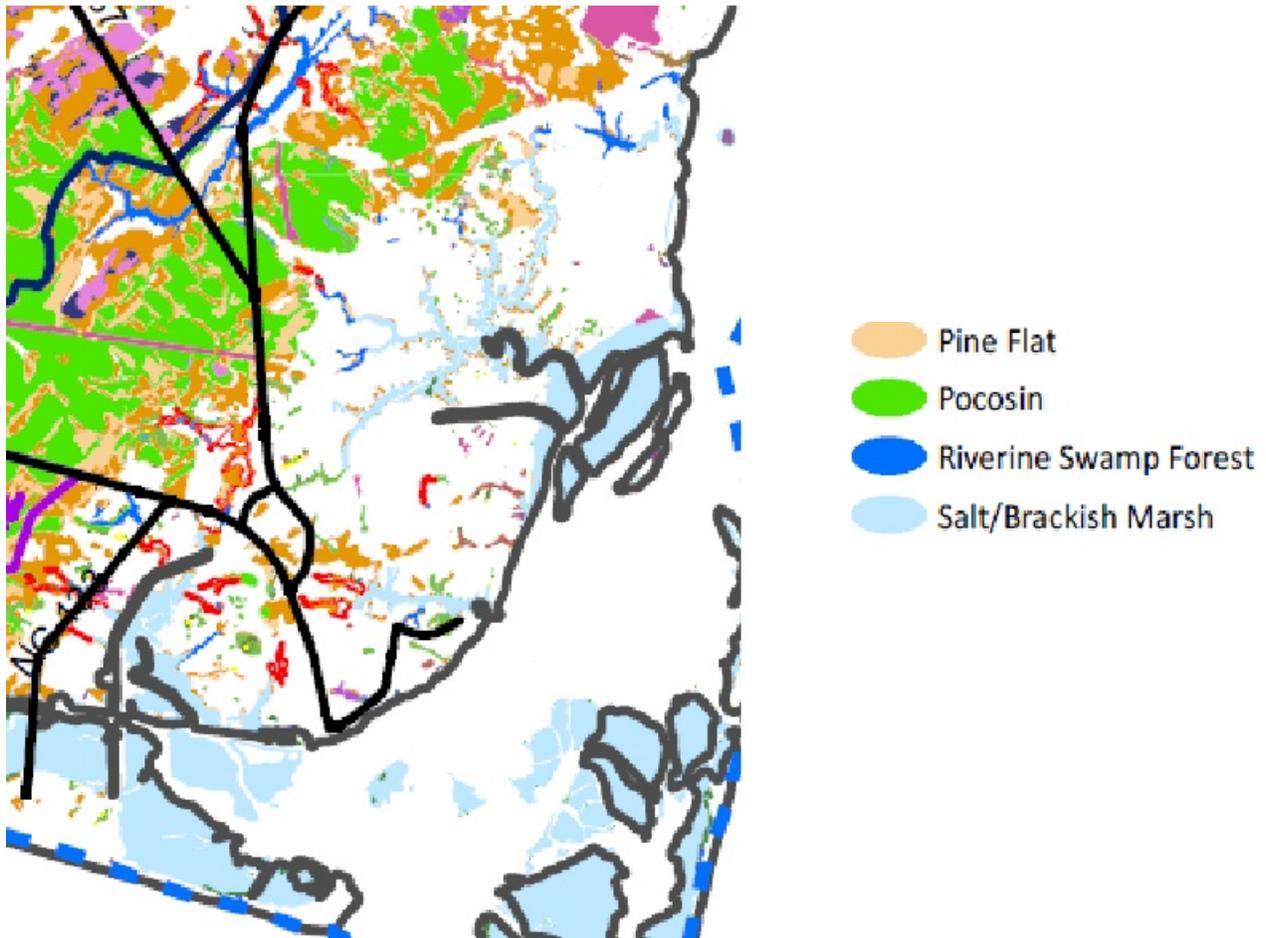
### **Land Suitability Analysis**

- Least Suitable
- Low Suitability
- Moderate Suitability
- High Suitability

The map shows most of the area zoned “Industrial” to be unsuitable or of low suitability. The area occupied by the Brunswick Nuclear Plant and a sliver to the north is designated as “Moderate Suitability.”

## *Wetlands*

The planning process also included a mapping of the marsh and wetlands areas of the county. This is a portion of the resulting map:



This shows the western end of industrial zone to be pocosin, a kind of upland marsh. The blue region near the Cape Fear River, which takes in about 100 acres of the container terminal site, is salt marsh. The remainder of the industrial area drains into salt marsh.

## *The Planning Paradox*

A reading of the consultant's plan shows a thoughtful and thorough analysis—the foundation of a plan to use the land for the activities it can reasonably support and to prevent uses that would damage and destroy the environment and create conflict with adjoining uses. But when one turns to the final result, the maps of future land use at the end of the report, one

does not find a smart and sensitive plan of development founded on that analysis, but a reckless scheme of exploitation wholly unrelated to the findings of the professional planners.

The final plan places heavy industry on and around interior wetlands and ecologically sensitive estuarine marsh along the Cape Fear River. It assures damage to or destruction of those wetlands and pollution of valuable water resources in the Cape Fear watershed. Most astonishing is the proximity of heavy industry to the residential and historic areas of the City of Southport, the residential enclave of Walden Creek, and the residential City of Boiling Spring Lakes—wholly incompatible land uses. Then there are the middle and high schools and the Smithville Park, immediately adjacent to sites zoned for the most vile and noxious uses.

The inconsistency between the consultant's thoughtful land use plan and the actual zoning maps cannot be explained. But it should be. Perhaps it is just a mistake. Perhaps it is due to official inattention. Perhaps it is due to official incompetence. Or perhaps it is something else. This is an issue that needs immediate attention.

At this writing, most of the industrial-zoned land is undeveloped and undisturbed, and rezoning is feasible and would be effective to prevent the environmental damage, health risks and social disruption that would ensue from actual industrial development, such as the proposed container terminal. The principal existing industrial activity is the Brunswick Nuclear Plant, which the community has come to accept due to the large size of the site, providing a generous surrounding buffer area. The coal-fired cogeneration plant serving the Archer-Daniels-Midland facility immediately north of the City of Southport, and adjacent to residential areas, remains as a prominent example of a land use mistake.

#### Sources

Brunswick County, North Carolina, *Unified Development Ordinance*, January 2008.

Holland Consulting Planners, Inc., *Brunswick County CAMA Core Land Use Plan*, Adopted October 2007.