APPENDIX A:

DEFINITIONS

- **Areas of Environmental Concern (AECs) –**an area of natural importance that may be easily destroyed by erosion or flooding, or may have environmental, social, economic or aesthetic values that make it valuable to the public. In NC, the Coastal Resources Commission has set up four categories of AECs:

  A. The Estuarine and Ocean System

  B. The Ocean Hazard System

  C. Public Water Supplies

  D. Natural and Cultural Resource Areas

  AECs cover almost all coastal waters and less than 3 percent of the land in the 20 coastal counties.

- **Barrier Islands -** any land formation composed of unconsolidated materials lying on the ocean side of the mainland and which have the following characteristics: a) The land is an island or part of island with a density equal to or less than one residential unit per five acres; b) the island area has been assigned the most severe rank with regard to hurricane forces; c) the island area is not connected to the mainland by a permanent network of roads and bridges that would allow safe and timely evacuation by land rather than boat; d) the island area does not qualify for the National Flood Insurance Program as administered by the Federal Emergency Management Agency; e) the island area is classified as Conservation in the Land Use Plan; also includes estuarine islands, riverine islands, and spoil disposal islands *(note: further clarification of this definition will be provided with amendments to zoning and subdivision definitions).*

- **Best Management Practices (BMPs) -** A structural or nonstructural management-based practice used singularly or in combination to reduce non-point source pollutant inputs to receiving waters in order to achieve water quality protection goals.

- **Building -** a walled and roofed structure, a manufactured home, including a gas or liquid

storage tank, or other man-made facilities or infrastructures that are principally above ground.

- **Caliper –** a measurement of the diameter of the tree trunk measured at four and one-half feet above the ground level. Also, DBH, or diameter at breast height.

- **Carrying Capacity-** the number of individuals who can be supported without degrading the physical, ecological, cultural and social environments (e.g. without reducing the ability of the environment to sustain the desired quality of life over the long term).

- **Cluster Development –** A planning method that generally sites houses or structures on smaller parcels of land, while the additional land that would have been allocated to individual lots is converted to common shared open space. Typically, road frontage, lot size, setbacks, and other traditional development regulations are redefined to permit the developer to preserve ecologically sensitive areas, historical sites, or other unique characteristics of the land being subdivided.

- **Coastal Wetlands –** any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides (whether or not the tide water reach the marsh lands through natural or artificial watercourses), provided this shall not include hurricane or tropical storm tides

- **Community Boating Facility -** a private nonprofit boating facility including a dock, pier, and/or launching ramp on property which has water frontage, the use of which is intended to serve 5 or more residential lots or units. The right to use such facility must be conferred by an easement appurtenant to the residential lot it is intended to serve. No commercial activities of any kind, including commercial letting of slips to parties who are not residents of the waterfront subdivision, shall be allowed within the confines of the facility.

- **Cumulative Impacts-** two or more individual effects which when considered together are considerable or which compound or increase other environmental effects.

- **Designated Stream –** A stream that is identified as being a flowing surface water body generally excluding drainage ditches that terminate in stormwater management BMPs.

- **Development**-any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations; excluding bona fide farming activities.

- **Major Development -** the term *major development project* shall include but is not limited to shopping centers, subdivision and other housing developments, and industrial and commercial projects, but shall not include any project of less than 2 contiguous acres in extent (G.S. 113A-9. Definitions-NC Environmental Policy Act).

- **Environmentally Sensitive Areas or Sensitive Areas –** Areas including coastal wetlands, exceptional and significant non-coastal wetlands, land within 2000 feet of outstanding resource waters (ORW), aquifer recharge areas, significant natural heritage areas, and shellfish waters. These areas are those that generally make up the Resource Protection areas on the Land Classification Map.

- **Estuary –** refers to a body of water where fresh water from a river or stream mixes with salt water. These waters are tidally influenced and have varied salinity levels.

- **Estuarine Watersheds –** refers to the entire land area that contributes to surface drainage and other run-off into an estuary.

- **Exceptional Wetland – According to NC Division of Coastal Management** for both Riverine/Headwater and Depressional wetland classes, if any of the following conditions exists, the overall wetland rating is **Exceptional**.

  (1) The wetland is salt or brackish marsh, estuarine scrub shrub, or estuarine forest.

  (2) The wetland is adjacent to (within 300 feet of) a designated Primary Nursery Area.

  (3) The wetland contains a known occurrence of a threatened or endangered species of terrestrial or aquatic animal or plant on either federal or state lists or contains occurrences of exemplary or unique natural ecosystems or special wildlife habitat areas as designated by the NC Natural Heritage Program

- **Federally Regulated Wetland –** Wetlands regulated by the U.S. Army Corps of Engineers and the Environmental Protection Agency under the authority of Section 404 of the Clean Water Act of 1972.

- **Greenway –** means a series of connected green spaces that may follow natural features such as ravines, creeks, or other corridors.

- **100-Year Floodplain -** the floodplain that is at or below the 100-year flood elevation. The 100-year floodplain has been given a statistical probability of one in 100 of being flooded in any given year according to the best available data.

- **1% annual chance flood** – Standard adopted by the Federal Emergency Management Agency as the base flood for floodplain management and flood insurance purposes. A 1% annual chance flood (or base flood) has a 1% annual chance of being equaled or exceeded in any given year.

- **1% annual chance floodplain –**The 1% annual chance floodplain identifies areas that are expected to be inundated by the 1% annual chance flood.

- **High Hazard Flood Areas –** The AEC designation that covers lands subject to flooding, high waves and heavy water currents during a major storm. These are the lands identified as coastal flood with velocity hazard, or "V zones," on flood insurance rate maps prepared by the Federal Insurance Administration. "V zones" are determined by an engineering analysis of expected flood levels during a storm, expected wave and current patterns, and the existing topography of the land. The high hazard flood AEC often overlaps with the ocean erodible and inlet hazard AECs.

- **Hydric Soils -** Soils that are saturated or seasonally saturated with water at or near the surface (within 12-18 inches depending on soil type). Generalized characteristics include high organic matter content of the surface, low shrink swell potential, and frequent sustained flooding. All Class IV and some Class III Soils as defined in the 1981 technical report, *Classification of Soils in New Hanover County for Septic Tank Suitability*.

- **Impact Fees** – Money that local government collects from housing developers to pay for services that residents will need, such as schools, parks, road improvements and sewerage.

- **Impaired -** Term that applies to a waterbody that has a use support rating of partially supporting (PS) or not supporting (NS) of its designated uses.

- **Inlet Hazard Areas** – The AEC designation that covers the lands next to ocean inlets. Inlet shorelines are especially vulnerable to erosion and flooding and can shift suddenly and dramatically. For each inlet along the coast, the Division of Coastal Management prepares a hazard area map that is reviewed and approved by the Coastal Resources Commission. Each area is mapped based on a statistical analysis of inlet migration, previous inlet locations, narrow or low lands near the inlet, and the influence of man-made features, such as jetties and channelization projects.

- **Levels of Service (LOS)** – measures the quality, effectiveness or performance of a public service or facility. LOS represents the capacity of public infrastructure, both services and facilities, to meet demand. LOS rankings are given in grades from "A" (excellent) to "F" (failing). The minimum national acceptable LOS level in an urban environment is a "D".

- **Low Impact Development (LID) -** An approach to site development and storm water management that combines resource conservation, and a hydrologically functional site design with pollution prevention measures to reduce development impacts and to better replicate natural watershed hydrology and water quality. Through a variety of serially integrated small-scale site design techniques, LID controls runoff discharge, volume, frequency, and quality to mimic predevelopment runoff and hydrologic conditions.

- **Marina -** Any publicly or privately owned dock, basin, or wet storage facility constructed to accommodate more than 10 boats and providing any of the following services: permanent or transient docking spaces, dry storage fueling facilities, haul out facilities, or repair services. Excluded from this definition are boat ramp facilities allowing access only, temporary docking that includes none of the previous listed services, and community boating facilities.

- **Mooring -** any means to attach a ship, boat, vessel or other water craft to a stationary underwater device, buoy, buoyed anchor, or freestanding piling.

- **Non-Point Source (NPS) Pollution -** Pollution sources that do not have a single point of origin or are not introduced to a receiving stream from a specific outlet. Examples of nonpoint sources of pollutants include farms, urban areas, residential developments, construction sites and forests. Nonpoint source pollution is generally carried into the water from the land by stormwater runoff.

- **Ocean Erodible Areas –** The AEC designation that includes beaches and any other oceanfront lands that are subject to long-term erosion and significant shoreline changes. The seaward boundary of this AEC is the mean low water line. The landward limit of the AEC is measured from the first line of stable natural vegetation and is determined by adding:

    - a distance equal to 60 times the long-term, average annual erosion rate for that stretch of shoreline to

    - the distance of erosion expected during a major storm.

- **Open Space - Any** undeveloped or predominantly undeveloped land that has is set aside for its value for one or more of the following purposes: (i) park and recreational purposes, (ii) conservation of land and other natural resources, or (iii) historic or scenic purposes. Open space includes squares, plazas, greens, natural area preserves, parks, and greenways.

- **Outstanding Resource Waters (ORW) –** supplemental classification in North Carolina intended to protect unique and special waters having excellent water quality and being of exceptional state or national ecological or recreational significance. To qualify, waters must be rated "Excellent" by DWQ and have one of the following outstanding resource values:

  - Outstanding fish habitat or fisheries,
  - Unusually high level of water based recreation,
  - Some special designation such as NC or National Wild / Scenic / Natural / Recreational River, National Wildlife Refuge, etc.,
  - Important component of state or national park or forest, or
  - Special ecological or scientific significance (rare or endangered species habitat, research or educational areas).

  No new or expanded wastewater discharges are allowed although there are no restrictions on the types of discharges to these waters. There are associated development controls enforced by DWQ.

- **Passive Recreation**- those activities which avoid or minimize the use of impervious or built upon surfaces, such as raised wooden walkways, vegetated greenways, non-paved pathways, and other similar uses. Passive recreation activities shall conform to standards for setbacks, buffers, impervious surfaces, etc.

- **Pollutant** - Generally, any substance introduced into the environment that adversely affects the usefulness or health of a resource.

- **Primary Nursery Areas** (PNA) – those areas in the estuarine system where initial post-larval development takes place. These areas are usually located in the uppermost sections of a system where populations are uniformly very early juveniles.

- **Public Trust** – Refers to lands and waters subject to the Public Trust Doctrine. Black's Law Dictionary defines the public trust doctrine as a doctrine which, "Provides that submerged and submersible lands are preserved for public use in navigation, fishing, and recreation and the state, as trustee for the people, bears responsibility of preserving and protecting the right of the public to the use of the these lands and the waters above them for those purposes." Generally, areas included in the Public Trust are tidewaters to their farthest reach, tidelands, navigable waters, and permanently submerged lands, including those extending lakeward or seaward to the limit of state ownership.

- **Regional Nodes –** Concentrated development of regional scale commercial activity in the vicinity of key major intersections. Regional commercial activity, including big-box retail that serves a regional market, is directed to the nodes with the remainder of the commercial areas along a corridor outside of the node remaining at community scale and use intensity.

- **Riparian Access** - the legal right of waterfront property owners to construct docks or piers that are contained within the boundaries of their riparian area limit (90 degree angle from the edge of the channel back to the property line or shore).

- **Secondary Impacts-** later and unintended effects of any direct man-made action or

indirect repercussions of man-made actions.

- **Shared-Use Facilities –A boating facility used by multiple members of a community.**

- **Significant Adverse Impact –** shall include but not be limited to development that would directly or indirectly impair water quality, increase shoreline erosion, alter coastal wetlands or Submerged Aquatic Vegetation (SAV), deposit spoils waterward of normal water level or normal high water, or cause degradation of shellfish beds.

- **Significant Tree Cluster -** A tree cluster wherein one or more of the trees is a significant tree, or a cluster with at least three trees greater than 6" *caliper* and their associated understory. Additionally, a cluster determined to be significant by virtue of the size of the cluster, type of tree, location, health, or numbers.

- **Substantial Wetland –**Includes wetlands immediately adjacent to (forming part of the border of) a wetland with an overall rating of "Exceptional functional significance."

- **Streetscape -** means the area within a street right of way that contains sidewalks, street furniture, landscaping, or trees.

- **Tertiary Sewage Treatment** – Wastewater treatment process or processes in addition to primary and secondary biological treatments to provide a final stage to raise the effluent quality to the standard required before it is discharged to the receiving environment. Tertiary treatment is typically employed for the removal of nutrients such as phosphorus and nitrogen, carbon, and most BOD and suspended solids. Disinfection is also typically a part of tertiary treatment.

- **Total Maximum Daily Limit (TMDL)** – the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources in a water body.

- **Urban Service Area** - Areas within the Urban Service Boundary are considered to be Urban Service Areas, which either already do receive a full range of urban services, or are areas to which urban services may be extended in the future based on development needs and economy of extension of the infrastructure.

- **Urban Service Boundary –** The boundary line on the Urban Service Area Map that defines the extent of the planned Urban Services Area

- **Water Dependant Uses**- those activities or structures for which the use requires access or proximity to or siting adjacent to or within surface waters to fulfill its intended purpose, such as boat docks, ramps, shoreline stabilization measures, navigational aids and/or channels. Examples of structures that are not water dependant include but are not limited to commercial boat storage facilities, restaurants, residences, parking lots, trailers, hotels, motels, roadways, tennis courts, or swimming pools.

- **Waterfront Community** – A community located in proximity to navigable water that has at least 5 waterfront lots contiguous with the community.

- **Waterfront Lot –** For purposes of this plan, a waterfront lot is a lot that would have the ability by right pursuant to State rules to construct a private dock from the boundary of the property to access a deep water channel.

- **Water Quality Use Designation** - All surface waters in North Carolina are assigned a primary classification by the NC Division of Water Quality (DWQ) based on their designated best use. All waters must at least meet the standards for Class C or SC (fishable / swimmable) waters. The other primary classifications provide additional levels of protection for primary water contact recreation (Class B), shellfish waters (class SA) and drinking water (Water Supply Classes I through V).

- **Vegetated Buffer**- an area that is or will be vegetated with native plant species and which acts as a natural transition zone between surface waters and adjacent upland land uses. Vegetated buffers should maintain a diversity of native plant species and types (e.g. grasses, shrubs, and trees). These buffers are an effort to provide the following functions: filter suspended solids, nutrients, bacteria, and other pollutants before entering surface waters; provide soil stabilization; provide shading to assist in temperature regulation of estuarine waters; provide wildlife habitat and aesthetic beauty.

- **Watershed -** the area of land where water that falls or is contained therein runs off or drains into the same river, stream, lake, estuary, or aquifer.

Wilmington – New Hanover County

2006 CAMA Plan Update

APPENDIX B:
IMPLEMENTATION SUMMARY

In order to be a meaningful tool, any plan has to be implemented. For a plan to be implemented effectively and efficiently requires a strategy for implementation. The following implementation summary is an attempt to guide implementation of the many strategies contained in the CAMA Plan Update.

For each of the main topics the policies and implementation strategies have been summarized into tables with the following detail:

- The priority given to the action item;
- An assessment of resources required for implementation;
- The fiscal year in which it is proposed to be initiated; and
- The responsible agency.

The implementation summary will be used to evaluate progress in implementing the Plan.

In an ideal world, the responsible entities would implement all of the Plan's strategies in a timely manner. However, in the realities of local government budget constraints, staff resource limitations, and political pressures, some of the strategies identified in this plan will go without being implemented over the life cycle of this plan update. Many of the policies and strategies identified in this plan would require significant additional funds or staff to fully implement. Organizations wishing to acquire funds for these programs will be competing with numerous other programs that rely on public revenue sources for funding – from schools to fire and disaster response. City and County general fund priorities are driven by need and decisions are made based on the priorities as perceived by the sitting group of elected officials.

With these factors in mind, it is often the "low hanging fruit" – elements that give the highest rewards while expending the least effort to obtain - is all that can be implemented. That does not, however, mean that only the strategies that are most likely to be implemented should be identified in the plan. By charting a course beyond that which is reasonably achievable, this plan sets a course for reevaluation and reemphasis of important strategies in future planning cycles. Acknowledging these limitations, the implementation schedule indicates that the highest priority strategies with the lowest identified resource requirements will generally be implemented first.

Priorities: H= high, M= Medium, L=Low

Resources: $=less than $1,000; $$ = $1,000 to $10,000; $$$=$10,000 to 100,000; $$$$ = 100,000 to $1,000,000; $$$$$ = more than $1,000,000----S= less than 0.5 FTE staff; SS=0.5-1 FTE staff, SSS = more than 1FTE staff

Responsibility: N=New Hanover County, W=Wilmington; P=Planning, E=Engineering, SW=Stormwater

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
Natural Resources							
Water Quality	1.1 Make every effort to prevent further deterioration of estuarine water quality and loss of public trust uses in the creeks and sounds and improve water quality in all surface water bodies so that each water body meets its use designation as determined by the Divisions of Water Quality, Marine Fisheries, Health, and E.P.A.						
		1.1.1 Continue and enhance a regional water quality program to include ocean, river and estuarine water quality monitoring in cooperation with UNCW.	H	$$	2006	N&WP,UNCW	
		1.1.2 Continue to support the Lower Cape Fear River Program and the UNCW Tidal Creeks Program.	H	$$$	2006	N&W -P,UNCW	
		1.1.3 Identify watershed specific indicators of water quality degradation and establish baseline measures.	H	S	2006	N&W -P,UNCW	
		1.1.4 Establish water quality improvement goals in cooperation with the Watershed Management Advisory Board, UNCW, and State water quality specialists.	H	S	2006	N&W - P,UNCW, WMAB, DENR	
		1.1.5 Identify and prioritize water quality improvement projects, including wetland and stream restorations, which will improve water quality.	H	S	2006	N&W/P,UNCW, WMAB	
		1.1.6 Identify and pursue funding sources for priority projects in cooperation with the Watershed Management Advisory Board and non-profit agencies.	M	S	2006	N&W/P,UNCW, WMAB	
	1.2 Maintain water quality levels in all surface water bodies once their use-designation has been achieved.						
		1.2.1 Develop an expanded joint City/County water quality monitoring program in coordination with the Watershed Management Advisory Board to include rivers, lakes, streams, and adjacent ocean and estuarine systems.	M	$$	2007	N&W/P,UNCW, WMAB	
		1.2.2 Develop drainage systems and design standards that reflect the natural carrying capacity of the watershed (i.e.-soils, slope, permeability, & other natural features).	M	S	2007	N&W-Planning, Engineering, W-Stormwater Services	
		1.2.3 Develop specific water quality standards and development performance standards for each watershed, to include maximum impervious surface and appropriate BMPs.	H	S	2006	N&W-Planning, Engineering, W-Stormwater Services	
		1.2.4 Develop standards to ensure the retention, acquisition and management of natural vegetative buffers to preserve, maintain and protect water quality.	H	S	2006	N&W-Planning, Engineering, W-Stormwater Services, S&WCD	
		1.2.5 Update/develop subdivision design standards to protect and improve water quality in sensitive areas.	H	SS	2006	NHC & WIL	
		1.2.6 Identify and pursue funding sources for these programs.	M	S	2006	Stormwater Services, N&W-P	
	1.3 Ensure the protection of water quality throughout the Cape Fear River Basin and the management and maintenance of drainage within coastal watersheds through the development of countywide water quality / stormwater management programs.						

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		1.3.1 Establish County stormwater services department, including addressing Phase II requirements for all unincorporated areas of the County.	H	$$$$ SSS	2006	NHC	
		1.3.3 Develop educational programs and other strategies to deal with point and non-point source impacts on water quality, such as pet waste and other sources.	M	$,S	2006	Stormwater Services, S&WCD,N&W-P	
		1.3.4 Establish funding mechanisms to support these programs.		S		NHC	
		1.3.5 Request that the state establish less cumbersome procedures to recognize and accept innovative stormwater BMPs.	M	SS	2006	N&W-Planning, Engineering, W-Stormwater Services, S&WCD	
	1.4 Ensure the protection, preservation and wise use of our natural resources by careful review and consideration of the potentially adverse environmental impacts of development through the creation and implementation of an environmental review process.						
		1.4.1 Update City and County development processes and ordinances to incorporate the site inventory requirements as a necessary first step in preparing a site plan application.	H	S	2006	NHC & WIL	
		1.4.2 Prepare guidelines for conducting site inventories.	H	S	2007	Planning	
		1.4.3 Make data necessary to conduct site inventories readily available to all applicants.	H	S	2006	Planning	
		1.4.4 Assist applicants with conducting site inventories and preparing site plans that are sensitive to site features.	H	S	2006	Planning	
		1.4.5 Develop an environmental review process to be conducted by staff as part of the technical review process for all major development projects, or any development that requires a land disturbing permit. This process will include:	H	S	2006	Planning	
		1.4.6 Revise and update development/permit review process to incorporate environmental review as a seamless component.	M	S	2006	Planning	
		1.4.7 Include new standards to address resource protection, urban design, tree preservation, landscaping and other identified issues.	M	SS	2007	NHC & WIL	
	1.5 Provide further protection and improvement of water quality through revisions to City and County ordinances that specify standards for water quality, buffers, setbacks, density, impervious surface, and overlay corridors. Such standards should consider estuarine, lake, river and stream water quality; and should build upon existing information, including the Cape Fear Basinwide Plan, and ordinances.						
		1.5.1 Develop specific water quality standards and drainage performance standards for each watershed.	M	S	2008	N&W Planning, Stormwater, UNCW	
		1.5.2 Revise City and County Code to incorporate standards.	M	S	2009	N&W	
	1.6 Employ stormwater BMP retrofits to mitigate water quality impacts resulting from existing development.						
		1.6.1 Develop drainage systems and design standards that reflect the natural carrying capacity of the watershed (i.e.-soils, slope, permeability, & other natural features).	L	S	2009	W Stormwater, N Engineering	
		1.6.2 Prioritize watersheds and sub-watersheds based on current degree of impervious surfaces and degree of degradation with the most degraded or those most in need of protection receiving the highest priority.	M	S	2007	N&W - P,UNCW, WMAB	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		1.6.3 Target priority pollutants to identify most appropriate control measures.	M	S	2006	N&W - P,UNCW, WMAB	
		1.6.4 Identify, evaluate, and prioritize an inventory of retrofit opportunities to reduce or eliminate water quality impacts from stormwater on receiving waters.	H	$$,SS	2007	N&W P, SW, E, UNCW	
		1.6.5 Identify watershed specific sources of pollutants to help direct improvement measures.	M	SS	2006	N&W P, SW, E, UNCW	
		1.6.6 Establish a funding mechanism to support these efforts.	M	SS	2007	N&W - P,UNCW, WMAB, DENR	
		1.6.7 Provide incentives for innovative solutions.	M	$$,S	2006	N&W - P,UNCW, WMAB, S&WCD	
	1.7 Continue and expand programs to reduce the effects of existing development of water quality.						
		1.7.1 Expand a joint city/county drainage and water quality program to include ocean, river and estuarine water quality monitoring.	M	$$	2006	N&W - P,UNCW, WMAB, DENR	
		1.7.2 Expand educational programs and other strategies to deal with point and non-point source impacts to water quality, such as pet waste and other sources.	H	$$,S	2006	N&W P, SW, E, S&WCD	
		1.7.3 Continue to support the Lower Cape Fear River Program & the UNCW Tidal Creeks Program.	H	$$$	2006	N&W, S&WCD, WMAB	
		1.7.4 Seek legislation to require that NCDOT modify its standards to ensure the protection and enhancement of water quality.	H	S	2006	N&W, P, SW, E, WMAB,	
		1.7.5 Establish a program for public involvement to identify and acquire buffer land.	L	$$$$	2010	N&W, S&WCD, WMAB	
	1.8 Continue and expand programs for stream, buffer, wetland and vegetation restoration in and adjacent to areas that have been developed.						
		1.8.1 Identify and prioritize disturbed areas in degraded watersheds that restoration projects might benefit.	H	S	2006	N&W P, SW, E, UNCW	
		1.8.2 Cooperate with the Watershed Management Advisory Board and non-profit organizations to identify and pursue funding sources for highest priority restoration projects.	M	S	2006	N&W, P, SW, E, WMAB, S&WCD	
		1.8.3 Cooperate with New Hanover Soil and Water Conservation District in promoting an urban cost share program for restoration work on individual private properties.	L	SS	2006	N&W, P, SW,WMAB, S&WCD	
Open Space	2.1 Ensure the provision and preservation of adequate open space for the continuing enjoyment of residents, for its contribution to the community today and for generations to come, to protect our natural environment and wildlife habitats, and to provide educational and recreational opportunities.						
		2.1.1 Develop and implement a comprehensive, joint City – County open space, greenways, and trails master plan.	H	$$S	2006	N&W P. Parks	
		2.1.2 Develop and fund a downtown parks plan to include riverfront parks.	H	$$	2007	N&W P. Parks, WDI, Economic Development	
		2.1.3 Develop a funding program to ensure adequate resources are allocated.	H	$$$$S	2007	N&W	
		2.1.4 Develop public access/boat access area plans	M	$$SSS	2006	N&W P. Parks	
		2.1.5 Identify areas of opportunity for open space on the Future Land Use and Land Classification Maps.	M	S	2007	N&W P	
		2.1.6 Revise the development code to differentiate recreational open space requirements from natural area open space requirements.	H	S	2006	N&W P	
		2.1.7 Identify as part of the environmental review process opportunities for preservation of open space in new development projects.	M	S	2006	N&W P	
		2.1.8 Evaluate the development of a transfer of development rights (TDR) program.	L	S	2007	N&W P	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		2.1.9 Seek authorization from the General Assembly for TDR as necessary.	L	S	2008	N&W	
	2.2 Identify and protect greenways as a part of a natural areas master plan and protect these resources or mitigate their loss as part of the development process.						
		2.2.1 Identify and prioritize greenways for natural area preservation and passive recreation, particularly along the tidal creeks and the Cape Fear River along River Road.	M	S	2006	N&W P. Parks, SW, WMAB, S&WCD	
		2.2.2 Identify and secure funding to acquire land and easements along high priority corridors.	M	S	2007	N&W P. Parks, SW, WMAB, CWMTF	
		2.2.3 Develop incentives for private development to dedicate land and or easements to provide key links in the greenway system.	M	SS	2007	N&W P	
		2.2.4 Develop guidelines for mitigation.	L	S	2010	N&W P	
		2.2.5 Establish greenway links between adjacent communities	M	S	2008	N&W P, Parks	
	2.3 Encourage development patterns that maximize preservation of natural areas, buffers, and trees by developing standards for cluster development and other development types that allow greater design flexibility.						
		2.3.1 Evaluate mechanisms to include transfer of development rights, conservation development, and cluster development.	M	S	2007	N&W P	
		2.3.2 Develop guidelines and standards for use of preservation mechanisms.	L	SS	2009	N&W P	
		2.3.3 Identify high priority preservation areas during the development review process.	H	S	2006	N&W P	
		2.3.4 Develop awards and incentives programs to encourage use of preservation mechanisms.	M	S	2006	N&W P, NGOs	
	2.4 Identify mechanisms to preserve high quality farmlands and woodlands.						
		2.4.1 Inventory high quality farmlands and commercial woodlands.	L	S	2009	N-P, S&WCD	
		2.4.2 Identify incentives, including transfer of development rights and acquisition opportunities to preserve high priority remnants.	L	S	2009	N-P, S&WCD	
	2.5 Develop a greenway master plan that integrates Airlie Gardens with other parks, open space, and natural areas targeted in a natural areas preservation plan to achieve the following goals: provide public open space; protect water quality, the natural environment, and the coastal landscape; provide educational opportunities; and assure perpetual accessibility for the community.						
		2.5.1 Inventory existing natural areas.	H	S	2006	N&W P	
		2.5.2 Develop criteria for natural area preservation.	H	S	2006	N&W P	
		2.5.3 Develop and implement a joint city-county master plan for natural areas preservation in cooperation with the Watershed Management Advisory Board, Downtown Parks Committee, and City and County Parks Departments.	H	SS	2006	N&W P, Parks, WMAB, WDI	
		2.5.4 Develop a comprehensive open space, greenways, and trails system.	H	$$$$$S	2006	N&W P, Parks	
		2.5.5 Pursue preservation strategies, to include acquisition through grants, bonds, and other mechanisms.	M	$$$$S	2006	N&W, S&WCD, WMAB	
		2.5.6 Initiate a program to connect communities with Greenways.	L	S	2007	N&W P, S&WCD, WMAB	
		2.5.7 Address preservation of natural areas in the County Master Plan for Parks Recreation and Open Space.	H	S	2006	N P, Parks	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
	2.6 Ensure the protection of trees and the provision of adequate landscaping to address urban design and resource protection issues and encourage the use of native vegetation in landscaping through updating of city and county development ordinances and processes and establishment of a joint City-County Tree Advisory Commission.						
		2.6.1 Establish a joint City-County Tree Advisory Commission to develop City and County recommendations and ordinances addressing urban design and tree protection.	M	S	2007	N&W, WTAC	
		2.6.2 Develop standards that prohibit clear-cutting and allow only clearing of trees necessary for construction activities.	M	SS	2006	N&W P	
		2.6.3 Develop guidelines and incentives for use of native vegetation in landscaping.	L	S	2007	N&W P	
		2.6.4 Utilize the UDO Oversight Committee recommendations for revisions to the landscaping and tree protection code to update the County Code.	H	S	2006	N P	
	2.7 Encourage and support the replacement of trees lost to natural disaster and ensure the protection of significant community trees.						
		2.7.1 Establish a heritage tree program to protect species important to the area.	L	S	2006	N&W, WTAC	
		2.7.2 Conduct a tree inventory of public properties.	M	S	2008	Public Services, WTAC	
		2.7.3 Establish a list of trees to be replaced or planted.	L	S	2006	Public Services, WTAC	
		2.7.4 Identify funding sources to enhance tree maintenance and planting activities.	M	$$$	2006	N, W Public Services, WTAC	
	2.8 Provide for the protection and development of public shorefront and boat access areas.						
		2.8.1 Inventory existing public shorefront and access areas.	H	S	2006	N&W Parks, P	
		2.8.2 Develop public access/boat access area plans.	M	S	2007	N&W Parks, P	
		2.8.3 Identify and prioritize opportunities for providing additional public shorefront and access areas.	H	S	2006	N&W Parks, P	
		2.8.4 Identify funding opportunities for acquisition of priority sites.	M	S	2006	N&W Parks, P	
		2.8.5 Aggressively pursue the acquisition of remaining potential access locations.	H	$$$$$	2006	N&W Parks, P	
	2.9 Pursue opportunities for acquisition as a critical strategy in the provision and protection of open space and public spaces.						
		2.9.1 Identify priority preservation areas on Future Land Use and Land Classification Maps.	H	S	2006	N&W P	
		2.9.2 Develop a funding program to ensure adequate resources are allocated.	M	SS	2007	N&W	
Environmental Protection/Quality of Life	3.1 Preserve and restore shell fishing to all SA waters and restore the water quality of all non-supporting surface waters to levels necessary to support their use designations.						
		3.1.1 Continue and enhance a regional water quality program to include ocean, river and estuarine water quality monitoring in cooperation with UNCW.	H	$$	2006	N&W, UNCW, WMAB	
		3.1.2 Continue to support the Lower Cape Fear River Program and the UNCW Tidal Creeks Program.	H	$$	2006	N&W, UNCW, WMAB	
		3.1.3 Identify watershed specific indicators of water quality degradation and establish baseline.	H	$$,SS	2006	N&W P, UNCW, WMAB	
		3.1.4 Establish water quality improvement goals in cooperation with the Watershed Management Advisory Board, UNCW, and State water quality specialists.	M	SS	2006	N&W P, SW, UNCW, WMAB, S&WCD, DWQ, DCM, Sea Grant	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		3.1.5 Identify and prioritize water quality improvement projects, including wetland and stream restoration, which will improve water quality.	M	SS	2006	N&W P, SW, UNCW, WMAB, S&WCD, EEP	
		3.1.6 Identify and pursue funding sources for priority projects in cooperation with the Watershed Management Advisory Board and non-profit agencies.	M	SS	2006	N&W P, WMAB, S&WCD, LAND TRUSTS	
	3.2 Protect the Cape Fear River from the cumulative impacts of development by supporting the development and implementation of a Total Maximum Daily Limit (TMDL) to balance impacts from wastewater treatment plant and industrial discharges and upstream point and nonpoint sources of pollutants.						
		3.2.1 Support the protection of the Cape Fear River from the cumulative impacts of development.	H	S	2006	N&W P, Utilities	
		3.2.2 Track progress on the TMDL currently being developed in cooperation with the Lower Cape Fear River Program and interested stakeholders.	M	S	2006	N&W P, Utilities	
		3.2.3 Identify and propose non-point source reduction strategies that will relieve pressure on potential future point sources.	M	S	2007	N&W P, SW, Utilities	
		3.2.4 Support the Lower Cape Fear River Program, Cape Fear River Assembly, Cape Fear Resource, Conservation & Development Council, and the Cape Fear River Basin Modeling Program (NC Div. of Water Quality).	M	$$$	2006	N&W	
		3.2.5 Demand the development of best management practices and pursue their implementation for upstream non-point sources of pollution, including agricultural (hog, poultry, etc) and forestry operations.	H	S	2006	N&W	
		3.2.6 Support a continued moratorium on new or expanded industrial hog farming operations pending basinwide environmental impact assessment.	H	S	2006	N&W	
	3.3 Protect the Cape Fear River from the cumulative impacts of development by carefully reviewing development plans and enforcing measures to minimize their potential impacts from runoff or discharge of sediment, nutrients, and other pollutants to the river.						
		3.3.1 Establish development review guidelines which consider cumulative impacts on the River.	M	S	2007	N&W P	
		3.3.2 Develop standards as necessary to address identified resource protection issues.	M	S	2006	N&WP	
		3.3.3 Develop guidelines for mitigation of impacts.	L	S	2009	N&W P, DENR	
	3.4 Eliminate water pollution resulting from malfunctioning or inadequate septic systems, package treatment plants, and municipal wastewater treatment plants by continuing the phased development, expansion, and upgrades of the public sewer system within the urban services area to address these problems.						
		3.4.1 Update/develop subdivision design standards to protect water quality in sensitive areas not currently serviced by public sewer systems.	M	S	2007	N&W P	
		3.4.2 Phase out existing package treatment plants and prohibit new package treatment plants in areas where City / County capacity becomes available.	M	S	2006	N&W P, Utilities	
		3.4.3 Identify areas currently served by septic systems and package treatment plants that are inadequate, malfunctioning, or exceeding permit requirements.	M	S	2006	N&W P, Utilities, DENR	
		3.4.4 Identify sewer lines and pump stations that have released untreated sewage in the past.	H	S	2006	N&W Utilities, P	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		3.4.5 Set priorities for extension, repair or upgrade of sewer lines and facilities and include in capital improvements budgets.	H	S	2006	N&W Utilities, P	
		3.4.6 Ensure routine inspection, maintenance and repair of all wastewater treatment facilities.	H	$$$,SSS	2006	N&W Utilities, P	
	3.5 Conduct an environmental review to include an analysis of cumulative impact prior to sewer system development or extension.						
		3.5.1 Develop specific standards for extension of sewer systems into sensitive areas.	H	S	2006	N&W Utilities, P	
		3.5.2 Develop guidelines for consideration of cumulative impacts.	M	S	2007	N&W P, Utilities	
		3.5.3 Develop guidelines for review of impacts in accordance with goals of avoidance, minimization, compensation and/or mitigation.	M	S	2007	N&W P, Utilities	
		3.5.4 Develop and implement BMPs to minimize impacts to natural resources from utility line placement, maintenance, and repairs.	H	S	2006	N&W P, Utilities	
		3.5.5 Develop guidelines for mitigation of impacts.	M	S	2007	N&W P, Utilities, DENR	
	3.6 Protect surface water quality by allowing only tertiary sewage treatment plants of the highest quality, whose standards of operation provide the greatest measure of water quality protection, to discharge into public surface waters. Prohibit on- or off- site land application of untreated wastewater. Allow land application of dewatered sludge at sites located such that it does not degrade surface waters.						
		3.6.1 Inventory and review all existing land application sites.	M	SS	2006	N&W P, Health, DENR	
		3.6.2 Discontinue any land application in sensitive watersheds.	M	S	2006	N&W P, Health, DENR	
		3.6.3 Discontinue any land application of treated or untreated wastewater or byproducts that may result in increased nutrient loading to the receiving water body.	L	S	2006	N&W P, Health, DENR	
		3.6.4 Develop specific performance standards for setbacks and natural vegetated buffers to assure assimilation of nutrients and pathogens for any land application site.	L	S	2007	N&W P, Health, DENR	
	3.7 Ensure the protection of coastal and federally regulated wetlands that have important functional significance through early identification in the development process. Review of development proposals should seek to achieve the hierarchical goals of impact avoidance, minimization, and/or compensation.						
		3.7.1 Identify exceptional and substantial wetlands as resource protection areas on the land classification map.	H	S	2006	N&W P	
		3.7.2 Develop standards for protection of exceptional and substantial wetlands and include them in the Conservation Overlay District ordinance to accomplish goals of wetland avoidance, minimization, or mitigation.	H	SS	2006	N&W P	
		3.7.3 Require delineation of wetlands and describe steps taken to protect wetlands prior to site plan development for new projects.	H	S	2006	N&W P	
		3.7.4 Develop standards for low impact development and site planning for projects in conservation, resource protection, coastal wetlands, 404 wetlands or other sensitive areas.	H	S	2006	N&W P, SW, Engineering, DENR	
		3.7.5 Develop and adopt wetland mitigation standards.	L	S	2008	N&W P, DENR	
		3.7.6 Utilize existing wetland mitigation funds to help mitigate the loss of wetlands.	M	S	2006	N&W P, EEP	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
	3.8 Ensure the protection of undeveloped barrier and estuarine system islands by avoiding development, supporting research and passive recreation as their primary uses, and identifying such islands as prime candidates for public acquisition.						
		3.8.1 Identify properties on these islands as priority targets for acquisition / protection.	H	S	2006	N-P, Land Trust	
		3.8.2 Cooperate with non-profit agencies and private landowners to acquire property or conservation easements.	M	S	2006	N-P, Land Trust, S&WCD, CFRC&D	
		3.8.3 Develop partnerships with conservation organizations and private entities sharing the goal of acquiring these islands.	L	S	2006	N-P, Land Trust, S&WCD, CFRC&D	
		3.8.4 Identify and pursue sources of funding.	L	S	2006	N-P, Land Trust, S&WCD, CFRC&D	
		3.8.5 Continue to support efforts for protection of Masonboro Island Estuarine Research Reserve.	M	$$	2006	N&W	
	3.9 Carefully control development activities within the 100-year floodplain (1% annual chance floodplain) according to density and impervious surface limits to protect the public safety, reduce the risk of property damage, and provide for the long-term protection and management of these environmentally significant resources. The following standards shall apply: a. Limited, exceptionally designed industrial, commercial, and residential development projects may be allowed within the floodplain only where it can be demonstrated that the project cannot be located out of the floodplain and where adverse impacts to the estuarine system can be shown to be negligible. b. Low intensity uses on a site, such as open space and recreation, should be located in areas most susceptible to flooding. c. All projects shall comply with hierarchical review standards of impact avoidance, minimization, and mitigation for unavoidable impacts.						
		3.9.1 Limit density and impervious surface areas in floodplain as stated elsewhere in this plan.	M	S	2006	N&W P	
		3.9.2 Develop specific performance standards for *"exceptionally designed"* residential, commercial and industrial projects that would be allowed in the floodplain.	M	SS	2006	N&W P	
		3.9.3 Develop guidelines for review of impacts in accordance with goals of avoidance, minimization, and mitigation.	M	S	2006	N&W P	
		3.9.4 Incorporate review of exceptionally designed projects into the development review process.	M	S	2006	N&W P	
		3.9.5 Develop guidelines for mitigation of impacts.	L	S	2008	N&W P, SW	
		3.9.6 Identify funding for acquisition of properties in the flood plain that are unsuitable for development.	L	S	2009	N&W P, SW, S&WCD	
	3.10 Protect the health of coastal ecosystems by requiring the consideration in all land use decisions and in the development or revision of local plans, capital facilities, services, and ordinances of the *cumulative and secondary impacts* of land use and development, and the limited *carrying capacity* of coastal ecosystems.						
		3.10.1 Identify how limited carrying capacity and cumulative and secondary impacts relate to development patterns.	M	S	2007	N&W P	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		3.10.2 Convey results of site inventory review to include identification of historical, archaeological and natural resources to the permitting body.	M	S	2006	N&W P	
		3.10.3 Develop guidelines for the evaluation by the permitting body of cumulative impacts on the community.	M	S	2007	N&W P	
	3.11 Allow channel and inlet maintenance projects, including the continued use and development of the Wilmington Harbor and the State Ports and maintenance of the Atlantic Intracoastal Waterway, and beach renourishment projects only where the public trust interest is preserved or enhanced; significant economic or recreational benefits will occur for New Hanover County residents; and no significant adverse impacts will occur on shoreline dynamics. Support State and Federal channel and inlet maintenance projects.						
		3.11.1 Request that the Corps of Engineers implement an integrated regional dredging and renourishment program.	M	S	2006	N	
		3.11.2 Encourage cooperation among the beach towns in prioritizing and balancing local projects.	M	S	2006	N	
	3.12 Carefully control development and redevelopment activities within the Watershed Resource Protection and Conservation areas identified on the Land Classification Map to prevent the degradation of water quality in the creeks and sounds, to protect the public health, and to ensure the protection of these vital natural resources by reducing nutrient, pesticide, sediment and other pollutants. The following standards shall apply a. Impervious surface coverage shall be limited to twenty-five percent (25%) in the Watershed Resource Protection and Conservation areas. b. Projects that conform to adopted exceptional design standards for enhanced stormwater controls may exceed 25% in the Watershed Resource Protection areas. c. Natural vegetative buffers shall be established to effectively filter runoff before it enters surface waters.						
		3.12.1 Identify Watershed Resource Protection areas and Conservation areas on the Land Classification map.	H	S	2006	N&W P	
		3.12.2 Revise standards for exceptionally designed residential projects to be applied to impervious surface limits.	H	S	2006	N&W P	
		3.12.3 Develop exceptional design standards for commercial projects that allow exceeding the impervious surface limit in the Watershed Resource Protection areas.	H	SS	2006	N&W P	
		3.12.4 Develop exceptional design standards for redevelopment projects allowing the same or greater impervious surface coverage on the lot as exists in Conservation and Watershed Resource Protection areas.	M	S	2006	N&W P, SW	
		3.12.5 Implement the 25% impervious surface cover threshold for commercial and redevelopment projects once exceptionally designed project standards have been developed.	H	S	2006	N&W P	
		3.12.6 Develop standards to relax height limits in Resource Protection areas.	M	S	2007	N&W P	
		3.12.7 Revise City and County Code to incorporate standards.	M	S	2007	N&W P	
		3.12.8 Develop specific water quality standards and development performance standards for each watershed, to include maximum impervious surface, buffers, permeable paving, reduced parking surfaces, and others.	M	S	2006	N&W P	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		3.12.9 Update/develop subdivision design standards to protect and improve water quality in sensitive areas.	M	S	2007	N&W P	
	3.13 Designate streams on which to establish standards for vegetative buffers to preserve, protect, and restore water quality and vital estuarine resources.						
		3.13.1 Develop criteria for designated streams.	M	S	2006	N&W P	
		3.13.2 Define designated streams on a map.	H	S	2006	N&W P	
		3.13.3 Develop standards for the determination of appropriate vegetative buffer width.	M	S	2006	N&W P	
		3.13.4 Develop specific performance-based buffer standards for each watershed [based on use designation].	M	S	2006	N&W P	
		3.13.5 Adapt standards to maintain, alter and properly manage vegetation within the buffer areas from existing COD standards.	L	SS	2006	N&W P	
		3.13.6 Develop standards for stream restoration.	L	S	2008	N&W P, SW, DENR	
		3.13.7 Develop procedures to ensure the preservation, acquisition and management of natural vegetative buffers.	L	S	2007	N&W P, S&WCD	
		3.13.8 Revise and update the County and City Development Ordinances and development review process.	M	S	2006	N&W P	
		3.13.9 Continue to support the Lower Cape Fear River Program & the UNCW Tidal Creeks Program and the Watershed Management Advisory Board.	M	$$	2006	N&W	
		3.13.10 Continue to enforce the setbacks and buffers on Conservation Resources as adopted in the COD ordinance.	M	S	2006	N&W P	
	3.14 Encourage development away from exceptional and substantial wetlands, sensitive areas and natural heritage areas by allowing greater design flexibility in cluster development and other alternative development types.						
		3.14.1 Identify exceptional and substantial wetlands and natural heritage areas as Resource Protection areas on Land Classification Maps.	M	S	2006	N&W P	
		3.14.2 Develop a plan for prioritization and protection of natural heritage areas.	M	SS	2007	N&W P	
		3.14.3 Develop awareness of and protective measures for natural heritage areas.	M	S	2006	N&W P, SW, Engineering	
		3.14.4 Adopt specific development standards to preserve wetlands and a protective buffer.	H	S	2007	N&W P, Engineering	
		3.14.5 Develop standards for design flexibility that will encourage preservation of wetland areas and sensitive natural heritage areas.	H	S	2007	N&W P, Engineering	
		3.14.6 Identify and pursue funding mechanisms to acquire high priority sensitive areas and natural heritage areas.	M	S	2007	N&W P, S&WCD, WMAB	
		3.14.7 Establish incentives, including transfer of development rights, to protect high priority sensitive areas and natural heritage areas.	M	SS	2009	N&W P	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
	AREAS OF ENVIRONMENTAL CONCERN:						
	3.15. Prohibit the use of estuarine waters, estuarine shorelines and public trust areas for development activity which would result in significant adverse impact to the natural function of these areas.						
		3.15.1 Develop standards based on natural functions to protect estuarine shorelines and public trust areas from significant adverse impact.	L	S	2008	N&W P	
		3.15.2 Develop and implement a strategy for review and enforcement.	L	S	2009	N&W P	
	3.16 Prohibit incompatible development in ocean erodible areas, inlet hazard areas, high hazard flood areas, and coastal and federally regulated wetlands and required buffers to protect public safety, reduce the risk of property damage, and provide for the long-term protection and management of these environmentally significant resources due to their natural role in the integrity of the coastal region.						
		3.16.1 Identify areas of concern and regulate development accordingly.	L	S	2009	N&W P	
	3.17 Support the preservation, protection, and addition of remaining privately held properties to the Masonboro Island Estuarine Research Reserve.						
		3.17.1 Support the protection and preservation of Masonboro Island Estuarine Research Reserve.	M	$$	2006	N&W P	
		3.17.2 Pursue additional land acquisition and preservation strategies in cooperation with the Watershed Management Advisory Board.	M	S	2006	N P, WMAB, S&WCD	
		3.17.3 Develop guidelines for the environmental review process to ensure no significant adverse effects from mainland development activities.	M	S	2007	N&W P	
		3.17.4 Support the scientific research activities of the Reserve.	M	$$	2006	N&W	
	3.18 Provide public access to public trust waters by allowing the development of marinas, dry stack storage, and moorings to the extent that their development shall not adversely affect estuarine resources or public trust waters. The following standards shall apply: a. Marinas as defined in this plan shall not be allowed in Primary Nursery Areas (PNA), Outstanding Resource Waters (ORW), or open Shellfishing Waters (SA). Limited exceptions may be allowed in the Urban Water Front District, to the extent that they are consistent with the goals and objectives of the Cape Fear River Corridor Plan (1997) and the Wilmington Vision 2020 Plan (2004), and in designated areas zoned Waterfront Urban Mixed Use Districts. Community boating facilities of any size that may be permitted by the Division of Coastal Management may be allowed for waterfront communities. b. Moorings and mooring fields shall not be allowed where they may have an adverse effect on navigation channels. c. Pump out facilities shall be required for existing marinas with more than 10 slips which have boats containing enclosed heads.						
		3.18.1 Adopt standards for community boating facilities for the County and City codes.	M	SS	2006	N&W P	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		3.18.2 Join NC Clean Marina program and require marinas and community boating facilities to develop a management plan incorporating BMPs of the Clean Marinas Program.	H	S	2006	N&W P	
		3.18.3 Develop standards to prohibit activities at marinas and boating facilities that result in water pollution.	H	S	2006	N&W P	
	3.19 Allow uses of estuarine and public trust waters that provide benefits to the public and satisfy riparian access needs of private property owners while encouraging shared use facilities. In tidal waters, individual docks shall be allowed only when shared use facilities are not provided for.						
		3.19.1 Develop public access/boat access area plans and integrate with parks and open space plans.	H	SS	2006	N&W P, Parks	
		3.19.2 Identify public access area opportunities on Future Land Use and Land Classification Maps.	M	S	2006	N&W P	
		3.19.3 Work with NCDOT to create and maintain public access for small craft at DOT stream crossings.	M	S	2006	N&W P	
		3.19.4 Identify funding strategies for acquisition of high priority sites.	M	S	2007	N&W P	
	3.20 Prohibit new dredging activities in Primary Nursery Areas (PNA), Outstanding Resource Waters (ORW), and Shellfishing Waters (SA), except for the purpose of scientific research, projects designed for the purpose of protecting and enhancing water quality, and where supported by sound scientific and technical knowledge. Limited exceptions may be allowed for the urban waterfront and Wilmington's ports, consistent with the goals and objectives of the Cape Fear River Corridor Plan (1997) and the Wilmington Vision 2020 Plan (2004) and for inlet management projects as permitted by the U.S. Army Corps of Engineers, and in accordance with the provisions in the implementation strategies below.						
		3.20.1 Identify heavily silted areas that are blocking navigation and flushing of tidal area.	M	S	2007	DCM, N&W P, COE,	
		3.20.2 Develop standards to allow dredging in heavily silted areas where independent scientific data documents a water quality benefit.	L	S	2008	DCM, N&W P, COE,	
		3.20.3 Identify specific exceptions based on adopted plans.	L	S	2008	DCM, N&W P, COE,	
		3.20.4 Exceptions may be permitted for maintenance dredging as permitted by the Division of Coastal Management provided they meet these criteria:	L	S	2006	DCM, N&W P	
		3.20.5 Identify navigational channels to establish baseline data.	M	S	2006	DCM, N&W P, COE,	
	3.21. Prohibit clearcutting, mowing, or removal of coastal wetland vegetation within any coastal wetland AEC.						
		3.21.1 Identify coastal wetland areas to be protected on an environmental composite map.	M	S	2006	N&W P	
	3.22. Prohibit floating home development in order to protect our public trust and estuarine waters and to avoid impacts on hurricane mitigation efforts.						
		3.22.1 Adopt measure to implement in City and County codes.	L	S	2007	N&W P	
	3.23. Accommodate existing properties and structures along our estuarine shorelines by allowing flexibility for retreat from migrating shoreline and wetlands. Develop strategies to reduce property damage from future threats.						

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		3.23.1 Request that the State develop a policy of retreat for coastal areas.	L	S	2007	N&W P	
		3.23.2 Identify areas where shoreline properties may be subject to future threats from erosion or inundation.	L	SS	2007	N&W P	
		3.23.3 Make available to the public information related to erosion rates, inlet movements and other factors that could affect coastal properties.	L	S	2007	N&W P	
	3.24. Allow shoreline erosion control and stabilization above marsh wetlands only where the public trust interest is not impacted and the public shoreline will be the primary beneficiary. The shoreline stabilization method chosen shall, to the maximum extent feasible, maintain water quality and avoid or minimize adverse effects on nearshore habitat or natural resources.						
		3.24.1 Develop specific performance standards for shoreline stabilization projects.	M	S	2007	DCM, N&W P	
		3.24.2 Encourage alternatives to bulkheads, such as marsh sills and vegetative stabilization.	M	S	2006	N&W P	
	3.25. Ensure the continued protection of ecologically sensitive ocean and estuarine shoreline areas through monitoring and control of off-road vehicle use, including signage programs, rewards, increased fines, and other means.						
		3.25.1 Identify sensitive areas for restricting off-road use.	L	S	2006	N&W P, DCM	
		3.25.2 Identify problem areas.	H	S	2006	N&W P, Police, Sheriff	
		3.25.3 Develop and enhance standards, awareness programs, and enforcement to improve control.	M	SS	2007	N&W P, Police, Sheriff	
	POTABLE WATER SUPPLY:						
	3.26. Ensure that all land use and development decisions protect groundwater aquifers.						
		3.26.1 Monitor changes to the freshwater aquifers resulting from groundwater pumping activities and River channel dredging activities.	M	S	2006	N&W Utilities, P, DENR	
		3.26.2 Develop strategies to avoid degradation of freshwater aquifers from salt water intrusion.	H	S	2006	N&W Utilities, P, DENR	
		3.26.3 Balance groundwater extraction to optimize long term aquifer viability.	H	S	2006	N&W Utilities, P, DENR	
		3.26.4 Update standards to ensure that land use in the critical recharge areas for the aquifers are protective of groundwater quality.	M	S	2006	N&W P	
		3.26.5 Promote development patterns that promote aquifer recharge.	M	S	2006	N&W P	
	3.27. Protect groundwater aquifers by prohibiting the development of mining operations if adverse impacts to the ground water aquifer will likely occur.						
		3.27.1 Develop guidelines for review of mining operations and other intrusive operations to determine their potential impact on groundwater resources.	L	S	2008	N&W P, DENR, Engineering	
		3.27.2 Require BMPS to prevent adverse impacts for intrusive operations.	M	S	2007	N&W P, DENR, Engineering	
	3.28. Preserve the Castle Hayne and Pee Dee aquifers in their present unpolluted state as the primary groundwater resources for the County.						
$$		3.28.1 Conduct a study to determine best practices to ensure continued groundwater recharge in this area as development occurs and implement recommended strategies.	M	$$ SS	2007	N&W Utilities, P, DENR	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		3.28.2 Limit density to 2.5 units per acre until standards are developed for land use in the secondary recharge area of the aquifers to encourage development patterns that prevent groundwater contamination.	H	S	2006	N&W P	
		3.28.3 Maintain the resource protection classification of this area on the Land Classification map.	H	S	2006	N&W P	
		3.28.4 Allow density to increase to urban densities in the Aquifer Resource Protection Areas as sewer service is provided.	L	S	2007	N&W P	
		3.28.5 Require on-site infiltration to the extent soils allow.	H	S	2006	N&W P	
	OTHER FRAGILE OR HAZARDOUS AREAS						
	3.29. Review and update plans for the safe transportation of hazardous materials, the prevention and clean-up of spills of toxic materials, and the evacuation of area residents in response to natural or man-made hazardous releases.						
		3.29.1 Review current spill and hazardous incident response plans.	M	S	2007	N&W Emergency Management, Fire, Police, P	
		3.29.2 Update plans based on experience and current state of practice.	M	SS	2008	N&W Emergency Management, Fire, Police, P	
	3.30. Protect area residents by designating suitable locations for the siting of all industries, including energy facilities and high voltage power lines and opposing the development of all off-shore mineral, oil, and gas resources.						
		3.30.1 Develop use specific siting guidelines and zoning restrictions.	L	S	2007	N&W P	
		3.30.2 Request resolution from the General Assembly opposing development of off-shore mineral, oil and gas resources.	M	S	2006	N&W	
	AIR QUALITY:						
	3.31. Ensure the protection and enhancement of air quality in the community through continued commitment and actions to meet or exceed State and National Air Quality Standards.						
		3.31.1 Promote compact development and infill that minimizes vehicle trips and vehicle miles traveled with a mix of integrated community uses (e.g., housing, shops, workplaces, schools, parks, and civic facilities) within walking or bicycling distance.	M	S	2006	N&W P	
		3.31.2 Encourage development patterns and neighborhood street designs that are conducive to pedestrian and bicycle use (e.g., narrower streets with bike paths).	M	S	2006	N&W P, Engineering	
		3.31.3 Encourage development located and designed to be convenient for access to public transit, thereby bringing potential riders closer to transit facilities and increasing ridership.	M	S	2006	N&W P	
		3.31.4 Provide information regarding the air quality implications of traffic congestion to the public in order to encourage utilization of mass transit, car and vanpooling, and other transportation management strategies that reduce air pollution.	L	S	2006	N&W P	
		3.31.5 Promote street designs that support/enhance access between neighborhoods and to neighborhood-based commercial developments.	M	S	2006	N&W P	
		3.31.6 Evaluate opportunities for expanding park and ride facilities throughout the County.	M	SS	2006	N&W P, TRANSIT AUTH	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		3.31.7 Encourage the use of alternatives to the automobile.	M	S	2006	N&W P, TRANSIT AUTH	
		3.31.8 Continue to participate with the Citizens Advisory Panel to the Chemical Industry	M	S	2006	N&W P	
		3.31.9 Review industry toxic release inventories to assure compliance.	L	S	2007	N&W P	
Land Use and Urban Design							
Land Use Demand	**LOCATION AND DEMAND:**						
	4.1 Designate sufficient land area and suitable locations for the various land use types.						
		4.1.1 Use projected needs and available services identified in the technical studies as the basis for land use allocations.	H	$, S	2006	W,N/ P	
		4.1.2 Prepare new land classification map.	H	$$, SS	2006	W N/ P	
		4.1.3 Compare projections with land classification map.	M	$, S	2006	W,N/ P	
		4.1.4 Perform periodic review of land consumption.	M	$,S	2006	W, N/ P	
		4.1.5 Locate land use types based on the land suitability analysis, environmental composite analysis and urban services area map.	H	$, S	2006	W,N/ P, E	
		4.1.6 Make land use decisions based on the land classification map, other plans and technical studies including the Parks, Recreation and Greenway Master Plan, Corridor studies, Wilmington's Future Land Use Plan, and transportation plans.	H	$, S	2006	W, N/ P, E	
		4.1.7 Inventory open space and vacant lands and identify priority lands for preservation on a land preservation map.	H	$$, S	2006	W, N/P	
	INDUSTRIAL USES:						
	4.2 Delineate areas for industrial use which will maximize the efficient use of infrastructure while protecting the fragile ecosystem from harm and protecting residents from undue impacts.						
		4.2.1 Provide services for heavy industrial uses in locations with adequate land area to accommodate expansive sites required for such uses.	M	$$$$$,SSS	2006	W,N	
		4.2.2 Locate industrial uses outside of environmentally sensitive areas and areas designated Resource Protection and Conservation on the land classification map.	H	$,S	2006	W,N/ P,E	
		4.2.3 Ensure that necessary infrastructure (i.e. utilities, transportation facilities) for industrial development is available or planned for industrial development in areas identified as suitable on the land classification map and consistent with the Urban Services Boundary and the Future Land Use Plan.	M	$$$$$,SSS	2006	W,N	
		4.2.4 Extend water and sewer service along the 421 Corridor where land is suitable for industrial development.	M	$$$$$,SSS	2006	W,N	
		4.2.5 Pursue development of an industrial and manufacturing center that is sensitive to the environmental limitations between US 117 and NC 133 along the I-140 corridor.	M	$$$$$	2006	W,N,O	
		4.2.6 Allow light industrial (clean) uses in mixed use areas with clear requirements for location on no less than collector streets, where utilities are available, and appropriate performance controls to address odor, noise, lighting and other impacts on surrounding uses.	M	$, S	2006	W,N/ P	
		4.2.7 Revise development regulations to include provisions for clean light industrial uses in mixed use areas.	M	$, S	2006	W,N/ P	
		4.2.8 Provide a wide choice of sites with good access to labor markets, suppliers & buyers through consultation with the Wilmington Industrial Development, the State Ports and other economic development interests.	M	$$$, S	2006	W,N/ P	
		4.2.9 Develop an inventory of sites to aid in attracting new industrial development to suitable areas.	M	$, S	2007	W,N/ P	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		4.2.10 Develop and enforce standards to ensure that heavy industrial areas have adequate access and are properly distanced from adjoining non-industrial areas to minimize impacts such as noise, fumes and lighting.	H	SS	2006	W,N/ P,E	
	COMMERCIAL USES:						
	4.3 Maximize effectiveness of commercial uses by assuring that land is available for commercial uses within close proximity to the markets they serve and by ensuring that such commercial uses do not diminish the quality of life in nearby residential areas.						
		4.3.1 Locate regional commercial nodes at major intersections consistent with the Land Classification Map, the Wilmington Future Land Use Plan and Corridor plans to accommodate uses that serve a regional market.	M	$$,SS	2006	W,N/ P,E	
		4.3.2 Follow recommendations of the Wilmington Bypass Steering Committee on designated interchanges.	M	$,S	2006	W,N/ P	
		4.3.3 Designate the central business district as a regional trade/office center.	M	$,S	2006	W/ P	
		4.3.4 Support development of the downtown convention center and quality development and design of the northern waterfront including provision of public access.	L/M	$$$,SS	2006	W,N/ P	
		4.3.5 Encourage any future development of CFCC downtown campus in an urban form.	M	S	2006	W,N/ P	
		4.3.6 Locate commercial centers to provide community level service and trade needs at key intersections or on major thoroughfares with appropriate performance and design requirements.	M	SS	2006	W,N/ P	
		4.3.7 Develop design standards for neighborhood level commercial development.	H	$$$,SS	2006	W,N/ P	
Urban Design and Character	**MIXED USE DEVELOPMENT:**						
	5.1 Promote mixed use development away from sensitive areas within the urban services area and higher density mixed use in redevelopment projects in order to maximize benefits from available infrastructure, preserve valuable natural resources including open space, and reduce dependency on the automobile.						
		5.1.1 Utilize performance criteria similar to the City's mixed use development ordinance to ensure proper design, density, access, etc. in the unincorporated County.	M	$$,SS	2006	N/P	
		5.1.2 Conduct design charettes, research regulations in other communities, and incorporate results into revised mixed use development regulations and site specific projects.	M	$$$,SS	2007	W,N/ P	
		5.1.3 Designate undeveloped and underdeveloped areas including those identified in the Wilmington Future Land Use Plan as mixed use to accommodate residential and less intense commercial, office, and industrial uses with strict performance controls.	H	$,S	2006	W,N/ P	
		5.1.4 Make location decisions consistent with the Future Land Use Map, the Land Classification Map, the Urban Service Area Map, existing land use, and zoning maps.	H	$,S	2006	W,N/ P,E	
		5.1.5 Provide incentives for redevelopment to high intensity mixed use in areas that have been abandoned or that are underutilized.	M	$,S	2007	W,N/ P	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
	DESIGN AND REGULATION:						
	5.2 Encourage innovative development strategies while providing flexible design guidelines that enhance the aesthetics and minimize adverse environmental impacts of the built environment.						
		5.2.1 Develop performance standards that will allow the mingling of compatible uses.	H	$,S	2006	W,N/ P,E	
		5.2.2 Develop specific urban design standards to emphasize the creation of public spaces.	H	$,S	2006	W,N/ P,E	
		5.2.3 Conduct design charettes to develop models (examples) of desirable characteristics of development elements (streets, parks, neighborhood services).	H	$$,SS	2006	W,N/ P	
		5.2.4 Provide incentives to property owners to preserve and reclaim key natural resources through innovative design.	H	$$$$,SS	2006	W,N/ P	
		5.2.5 Use available public and private resources to develop creative approaches toward acquisition.	H	$$$$,SS	2006	W,N/ P	
		5.2.6 Conduct research of regulations in other communities and develop changes to development regulations.	M	$,S	2006	W,N/ P	
		5.2.7 Build partnerships at the community level to educate citizens on issues ranging from low impact development to the protection of naturally vegetative buffers.	H	$,SS	2006	W,N/ P	
		5.2.8 Continue strict adherence to setbacks and zoning district regulations while implementing recommendations contained in corridor studies and the Bypass study.	H	$$,SS	2006	W,N/ P	
		5.2.9 Provide clear requirements for mixed use development to include maximum square footage, buildable area ratio, commercial to residential ratios, impervious surface coverage, landscape buffering, lighting, access, height, density, exterior materials, parking, orientation to the street, and other design parameters.	H	$,S	2006	W,N/ P	
		5.2.10 Identify opportunities to reduce visual impacts and incompatibility of telecommunication towers.	L	S	2006	W,N/ P	
		5.2.11 Explore the creation of a design- or form-based zoning code.	M	$,SS	2006	W,N/ P	
	5.3 Adopt specific performance criteria – including connectivity, transit facilities, and pedestrian and bike facilities - for new development and redevelopment that promote efficient transport of goods and services and provide alternatives to the automobile.						
		5.3.1 Provide design criteria for regional nodes to ensure the appropriate relationship to the existing streetscape. Criteria will address the issues of congestion, visual clutter, utilities and the proper relationship with adjoining properties.	M	$,SS	2006	W,N/ P	
		5.3.2 Assure consistency with plans for bike, pedestrian and other transportation facilities, and the extension of public utilities.	M	$,S	2006	W,N/ P	
		5.3.3 Promote alternative modes of transportation in design guidelines.	M	$,S	2006	W,N/ P	
		5.3.4 Review regional plans and plans for adjoining communities including Pender County, Brunswick County, Leland, Southport, and Hampstead to maximize efficiency and accommodate growth.	M	$,S	2006	W,N/ P	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
	5.4 Require new private and public development and redevelopment to be consistent with the intent and policies of this Plan, and any other applicable City or County plans including Community Growth, Wilmington Vision 2020, MPO Long Range Transportation Plan, Cape Fear River Corridor Plan, and Wilmington Future Land Use Plan, corridor plans, and neighborhood plans.						
		5.4.1 Develop process to review development and redevelopment proposals to assure consistency with adopted planning documents.	H	$,SS	2006	W,N/ P	
		5.4.2 Reference Approved plans, such as Wilmington Downtown Plan, Vision 2020 and the historic district guidelines, in applicable development regulations.	M	$,S	2006	W,N/P	
		5.4.3 Utilize regional planning efforts and plans from neighboring counties and cities to assure consistency.	M	$,S	2006	W,N/ P	
	INFRASTRUCTURE:						
	5.5 Establish mechanisms to guide development to urban service areas defined by the existence of essential urban services and the planned provision of those services.						
		5.5.1 Modify applicable plans, regulations and budgets to direct provision of urban-level services within the areas designated as “Urban,” “Transition,” and “Community” on the land classification map.	H	$,SS	2006	W,N/ P	
		5.5.2 Incorporate into the CIP for future years.	M	$,S	2007	W, N	
		5.5.3 Consider bond funding for planned infrastructure improvements.	M	S	2006	W,N/ P	
		5.5.4 Perform full cost analysis on service provisions and review rates.	M	$,SS	2006	W,N/ P	
		5.5.5 Encourage development within the urban services area where existing infrastructure is available.	H	$,S	2003	W,N/ P	
		5.5.6 Consider the cost of infrastructure that is land use driven in modifying development regulations.	H	$,S	2006	W,N/ P	
		5.5.7 Initiate innovative capital facilities financing as part of the development approval process	M	$,S	2006	W,N/ P	
		5.5.8 Pursue joint ownership by the City and County of major utility systems.	M	$$ SS	2006	W,N	
		5.5.9 Consider feasibility of joint City / County utilities authority.	M	SS	2006	W,N	
		5.5.10 Develop schematic collector street plan as a guide in the development approval process and implementation of an effective transportation network.	H	$,SS	2006	W,N/ P	
		5.5.11 Complete work on the collector street network in the metropolitan planning area and urban service area.	H	$$$$$	2006	W,N/ P	
		5.5.12 Consider providing state of the art technical services such as fiber optic lines which make the area more attractive to prospective commercial & industrial companies when planning other essential urban services.	L	$$$$$	2006	W, N	
	OPEN SPACE, CULTURAL AND RECREATION:						
	5.6 Develop a plan to acquire, protect and beautify historic and cultural sites, corridors along key roadways, railways, utilities, and streams, and significant natural areas.						
		5.6.1 Identify opportunities for preservation of natural areas and explore acquisition alternatives.	H	$,SS	2006	W,N/ P	
		5.6.2 Establish protective corridors along key roadways, historic and cultural sites and other areas that are visually significant.	H	SS	2006	W,N/ P	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		5.6.3 Monitor railroad and other rights-of-way for abandonment and pursue as potential open space, trailway and recreation areas.	M	$,S	2006	W,N/ P	
		5.6.4 Identify environmentally sensitive land as potential open space and recreation areas and key sites for parks. Incorporate into Parks Master Plan and Capital Improvement Programs.	H	$,S	2006	W,N/ P	
		5.6.5 Develop a local open space fund.	H	SS	2006	W,N/ P	
	RESIDENTIAL NEIGHBORHOODS:						
	5.7 Preserve the character of the area's existing residential neighborhoods and quality of life.						
		5.7.1 Protect existing residential neighborhoods and integrate development and growth with input from residents.	M	$,S	2006	W,N/ P	
		5.7.2 Encourage NC DOT to seek public input on new and expanding roadways and to mitigate impacts to neighborhoods.	L	$,S	2006	W,N/ P	
		5.7.3 Develop design standards to replace use standards where appropriate.	H	$,S	2006	W,N/ P	
Transportation							
Traffic	6.1 Initiate and support increased funding from local, state, and federal agencies to improve the flow of people and products to and in the City and County.						
		6.1.1 Coordinate with the Wilmington Urban Area Metropolitan Planning Organization (MPO) to improve the flow of people and products.	H	$,S	2006	W,N/ P	
		6.1.2 Implement MPO plans.	H	$$$$,SS	2006	W,N/ P	
		6.1.3 The MPO's transportation planning horizon shall be at a minimum 25 years to anticipate future growth.	M	SS	2006	W/P	
		6.1.4 Update transportation plan every 5 years.	H	$$$,SS	2006	W,N/ P	
		6.1.5 Explore and support innovative and technologically advanced transportation solutions.	H	SS	2006	W,N/ P	
	6.2 Support the MPO and the urban area jurisdictions in encouraging State and federal authorities to provide interstate connections to areas south of the urban area.						
		6.2.1 Determine feasibility of creating an interstate type facility to connect with I-20 at Florence, South Carolina and encourage cooperation with South Carolina DOT.	L	S	2006	WMPO, DOT	
		6.2.2 Continue to support the extension of Interstate 20 from Florence to Wilmington and Interstate 74 from Charlotte to Wilmington.	L	S	2006	W,N	
	6.3 Collaborate with the MPO and NCDOT and implement strategies of corridor and thoroughfare plans to improve the functioning of the existing street network to operate at a level of service of D or better.						
		6.3.1 The City and NCDOT shall implement the Corridor planning initiatives contained in Wilmington's Future Land Use Plan and Corridor plans.	H	$$$,SS	2006	W/P	
		6.3.2 Develop an Urban Congestion Management System and level of service standard.	M	$,SS	2006	W,N/ P	
		6.3.3 All appropriate law enforcement agencies shall improve the enforcement of traffic laws.	M	$$$,SS	2006	W,N	
		6.3.4 The City shall continue to provide continuous upgrade of traffic operations data and equipment to improve the area's signal system, and to provide the public with more information on this program.	M	$$$,S	2006	W	
		6.3.5 Continue to work with NCDOT to improve that portion of the signal system under their control.	M	S	2006	W,N	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		6.3.6 Work with the MPO and NCDOT to create a plan for interchanges at major intersections throughout the street network. Where necessary the City will participate in these improvements using impact fees, bonds and or tax increases.	M	SS	2006	W	
		6.3.7 Cooperate with NCDOT and other appropriate agencies to develop a plan to construct Separate bicycle and pedestrian facilities where appropriate.	M	$$,SS	2006	W,N/ P	
		6.3.8 Develop and implement a *connecting communities initiative* to encourage communities to provide multiple connections for automobile and alternative transportation modes.	M	SS	2006	W,N/ P	
		6.3.9 Coordinate new development timing to coincide with necessary road improvement completion schedules.	M	$,SS	2006	W,N/ P	
	6.4 Reduce the impact of new driveways on the roadway networks.						
		6.4.1 Prepare and adopt driveway standards that promote better traffic flow in the County.	M	$,S	2006	N P	
		6.4.2 Develop and enact land use policies that minimize driveway access to major thoroughfares.	M	$,S	2006	W,N/ P	
		6.4.3 Establish and implement access management plans, programs and strategies through development review and capital project programming.	M	$,SS	2006	W,N/ P	
		6.4.4 Adopt and enforce street standards containing access management provisions.	M	S	2006	W,N/ P	
	6.5 Require street connectivity and minimize cul-de-sac development through better collector street planning.						
		6.5.1 Develop collector street networks for small areas.	M	SS,$$$$$	2007	W,N/ P	
		6.5.2 Prepare and adopt collector street plans in cooperation with property owners and affected neighborhoods.	M	$,SS	2006	W,N/ P	
		6.5.3 Require paving of street stubouts to the property line and require signage to warn adjacent property owners of potential future road connections.	H	S	2006	W,N/ P	
		6.5.4 Implement collector street plan as areas are developed.	H	$,S	2006	W,N/ P	
		6.5.5 Coordinate with DOT to complete collector network through unincorporated areas	M	$$,S	2006	N/P	
		6.5.6 Reduce the number of private streets that impede interconnectivity.	M	S	2006	W,N/ P	
		6.5.7 Clearly identify existing and future stub outs as potential future road connections.	M	$,S	2006	W,N/ P	
	6.6 Improve the ability of existing and planned thoroughfares to operate more efficiently by requiring all new development to meet the intent and policies of this Plan, and any applicable corridor or thoroughfare plan.						
		6.6.1 Conform to the CAMA Plan policies by examining all proposed rezoning and subdivisions for compatibility with the intent and policies of the plan.	H	$,SS	2006	W,N/ P	
		6.6.2 Continue to require traffic impact analysis in the development review process for major development and redevelopment projects.	H	SS	2006	W,N/ P	
	ALTERNATIVE FORMS OF TRANSPORTATION:						
	6.7 Support improved non-highway transportation facilities, including rail, airport, and shipping facilities for both passengers and freight to access the area.						
		6.7.1 Encourage the improvement of freight and passenger rail service to Wilmington and New Hanover County.	L	S	2006	W, N	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		6.7.2 Encourage the growth of the North Carolina State Port at Wilmington with infrastructure improvements and increased channel depths for shipping.	L	S	2006	W	
		6.7.3 Support State Port projects such as internal connector roadway, north expansion and security projects.	L	S	2006	W,N	
		6.7.4 Encourage and support an alternative rail access to the Port of Wilmington	L	S	2006	W,N	
		6.7.5 Plan an alternative rail routing that bypasses the Downtown area. Consider the west side of the Cape Fear River.	M	S	2006	W,N/ P	
		6.7.6 Encourage the growth of the Wilmington International Airport.	L	S	2006	W,N	
		6.7.7 Support airport capital projects, access projects, and beautification projects.	L	S	2006	W,N	
	6.8 Collaborate with the NCDOT and the MPO to encourage alternative forms of transportation including regional rail, local transit, bicycle and pedestrian movement, Transportation Demand Measures such as van-pooling and ride sharing, and an inter-modal transportation system.						
		6.8.1 Implement the Transportation Demand Measures program being developed by the Wilmington Transportation Authority.	M	$$$,SS	2006	W,N	
		6.8.2 Implement the Cape Fear Public Transportation Authority's (formerly Wave Transit) Transit Master Plan.	M	$$$$$,S	2006	W,N	
		6.8.3 Periodically evaluate the feasibility of all forms of public transportation including buses, trolleys, and light rail for or any or all portions of the area.	M	$,SS	2007	W,N	
		6.8.4 Prepare a conceptual light rail master plan for the urban area and participate in ongoing NCDOT passenger rail and multi-modal feasibility studies.	L	SSS	2007	W	
		6.8.5 Monitor existing public transit service and identify potential service expansion and modification opportunities.	M	S	2006	W,N	
		6.8.6 Evaluate areas outside of Wilmington's jurisdiction to be included in the transit system.	M	S	2006	W,N/ P	
		6.8.7 Actively participate in ongoing NCDOT passenger rail and multi-modal facilities studies. Support funding objectives of the NCDOT in order to assure viability of the Charlotte to Wilmington passenger rail service. Support NCDOT efforts to provide passenger rail service between Wilmington and Charlotte and between Wilmington and Raleigh.	M	S	2006	W,N, WMPO	
		6.8.8 Design and construct the Wilmington Multimodal Transportation Center in downtown Wilmington.	M	$$$$$	2007	W	
		6.8.9 Develop regional connections for bike and pedestrian uses such as the East Coast Greenway.	M	$$$$,S	2006	W,N/ P	
	6.9 Provide alternatives to automobile transportation by requiring all new development, redevelopment, and improvements to existing facilities to make provisions for a comprehensive network of bicycle and pedestrian facilities, including pedestrian causeways, bridges, and crossings on collector streets and major arterials.						
		6.9.1 Implement the recommendations of the New Hanover County Bicycle Advisory Committee.	M	$$$$$,S	2006	W,N/ P	
		6.9.2 Seek Federal, State and local funding to implement the Plan.	M	SS	2006	W,N	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		6.9.3 Develop and implement a capital improvements schedule for construction of facilities.	M	S	2006	W,N	
		6.9.4 Strongly encourage the State to provide and improve bicycle and pedestrian facilities in conjunction with new construction and improvements to transportation facilities.	M	SS	2006	W,N	
		6.9.5 Identify bike route and greenway network in the Parks, Recreation and Open Space Master plan so that links can be provided during the development process.	M	$,S	2006	W,N	
		6.9.6 Initiate a connecting communities program to provide links for bike and pedestrian connections between adjacent communities.	M	S	2006	W,N/ P	
Environment	7.1 Strengthen environmental protection and mitigation of impacts during planning, construction and maintenance of transportation facilities.						
		7.1.1 NCDOT shall adhere to or exceed State and Federal environmental regulations for the construction and maintenance of transportation facilities.	H	S	2006	W,N/P, DOT	
		7.1.2 Review proposed NCDOT actions to insure compliance with applicable regulations.	M	S	2006	W,N/ P	
		7.1.3 The City of Wilmington shall establish standards for the construction of transportation facilities that meet or exceed State and Federal requirements for water quality and surface water management.	H	$,S	2006	W/P	
		7.1.4 Prepare and adopt specific design standards and ordinances to reflect community standards for resource protection to give specific guidance as to the required level of water quality protection.	H	$,S	2006	W,N/ P	
	7.2 Protect natural resources by requiring all projects to consider reasonable and feasible road construction and design alternatives.						
		7.2.1 The City and County shall seek legislation to require NCDOT to meet or exceed State and Federal requirements for water quality and surface water management.	H	S	2007	W,N & P	
		7.2.2 Identify specific concerns with NCDOT's current practices and seek legislation to address these issues.	M	$,S	2006	W,N/ P	
	7.3 Require all projects to avoid or mitigate noise, air quality, and other environmental impacts on existing residential areas when constructing and maintaining transportation facilities.						
		7.3.1 Review all proposals for the construction and maintenance of transportation facilities for noise and other environmental impacts on existing neighborhood areas.	M	$,S	2006	W,N/ P	
		7.3.2 All appropriate review boards shall review proposed local government and private actions to insure compliance with applicable regulations.	H	S	2006	W,N/ P	
Corridors							
	AESTHETICS:						
	8.1 Collaborate with the MPO to encourage the State to improve the community through enhancements of the streetscape, as identified in the 2004 Corridor Plans, and ensuring the preservation and use of indigenous flora on new and existing streets.						
		8.1.1 Coordinate with NCDOT to enhance streetscapes through the use of regulations, impact fees, bonds and or tax increases.	H	S	2006	W,N/ P	
		8.1.2 Identify corridors needing enhancement.	H	$,S	2006	W,N/ P	
		8.1.3 Develop plan for needed enhancements.	H	$,SS	2006	W,N/ P	
		8.1.4 Request funding from NCDOT for enhancements.	H	$$$	2006	W,N	
		8.1.5 Seek necessary local funding for enhancements and maintenance.	H	$$$	2006	W,N	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		8.1.6 Encourage private initiatives to improve streetscapes.	H	S	2006	W,N	
		8.1.7 Enforce regulations to create less obtrusive commercial signage and billboards.	H	S	2006	W,N	
		8.1.8 Promote undergrounding of utility lines in key areas such as gateways.	H	S	2006	W,N	
	8.2 Ensure through revised standards the provision of adequate landscaping and tree protection for parking lots, sidewalks and in street right-of-ways for both public and private projects.						
		8.2.1 Develop design standards, ordinances and regulations to improve parking lot and streetyard landscaping in new development and redevelopment projects.	H	$,S	2006	W,N/ P	
		8.2.2 Develop guidelines to limit light pollution at the entryways to Wilmington and along other roadways.	M	$,S	2007	W,N/ P	
	CORRIDOR PROTECTION:						
	8.3 Identify and utilize sources of funds and incentives to purchase or preserve thoroughfare or rail corridors in a timely and equitable manner. Where necessary, the City and County will participate in these improvements using impact fees, bonds and/or tax increases.						
		8.3.1 Collaborate with DOT to identify road and rail corridors as rapidly as possible through appropriate environmental studies.	M	$,S	2006	W,N/ P	
		8.3.2 The MPO and NCDOT will prepare Phased Environmental studies after adoption of the Thoroughfare Plan to identify proposed corridors as closely as possible in compliance with guidelines established by the National Environmental Protection Act (NEPA).	M	$$$,SS	2006	W/ P	
		8.3.3 Identify and enforce provisions of State and local law that protect Thoroughfare Plan Corridors.	M	S	2006	W,N	
		8.3.4 Cooperate with NC DOT to protect the Southern Bridge right-of-way through planning efforts.	H	$$,S	2006	W/P	
		8.3.5 Explore state legislation to expedite and fund right-of-way purchase.	M	$,S	2006	W	
	8.4 Investigate and use regulatory provisions for preserving thoroughfare and rail corridors.						
		8.4.1 Identify and enforce provisions of State and local law that protect Thoroughfare Plan Corridors.	M	S	2006	W,N	
		8.4.2 Modify local ordinances where necessary to provide the maximum amount of corridor protection allowed under State law.	M	$,S	2007	W,N/ P	
	8.5 Cooperate with NCDOT, railways, and other entities for the purchase of rail and road corridors for future transportation systems development.						
		8.5.1 Cooperate through an agreement to allow for the purchase of rail and road corridors.	M	$$$$,S	2007	W,N	
		8.5.2 Establish an agreement between the City and the County to allow the County to request that the City proceed with necessary actions to improve the street network.	M	SS	2006	W,N	
		8.5.3 Map planned corridors as required in State Statutes so that they can be preserved through the development review process	H	$,S	2006	W,N/ P	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
Community Infrastructure							
Facilities and Services	9.1 Provide timely, cost-effective and efficient capital facilities and community infrastructure consistent with specific infrastructure plans, to suitable areas within the urban services area and develop criteria for future expansion of the urban services area.						
		9.1.1 Evaluate the cost impact of extending community facilities within the urban services area.	M	$,SS	2006	W,N/ P	
		9.1.2 Develop a program for joint public/private infrastructure investment opportunities for infrastructure expansion.	M	$,SS	2007	W,N/ P	
		9.1.3 Develop a joint City-County Task force to review financing alternatives and to recommend alternative financing methods.	M	SS	2006	W,N	
	9.2 Coordinate, rationalize, and consolidate where appropriate City, County, and other governmental agencies programs for the provision and maintenance of infrastructure and community facilities and services.						
		9.2.1 Develop interlocal agreements and development codes to establish consistency.	H	SS	2006	W,N	
		9.2.2 Strengthen infrastructure inspection and maintenance programs in the County.	M	$$	2006	N	
		9.2.3 Determine staffing requirements and develop infrastructure requirements.	M	S	2006	W,N	
		9.2.4 Develop guidelines for the interregional sharing of sewer facilities when economically feasible.	M	SS	2007	W,N	
		9.2.5 Develop criteria for a cost sharing formula between jurisdictions.	M	S	2007	W,N	
	9.3 Explore alternative forms of financing for the infrastructure improvements needed to have a high quality level of service and to prevent a decline in the levels of service provided to County and City residents. Infrastructure needs to be addressed in this effort shall include transportation, education, sewer, water, recreation, libraries, police, fire, stormwater management, schools and other services deemed to be appropriate.						
		9.3.1 Develop a joint City-County Committee to review financing alternatives and to recommend financing methods.	M	SS	2006	W,N	
		9.3.2 Develop criteria, conditions, requirements and cost sharing formula for the development of financing structure.	M	SS	2006	W,N	
		9.3.3 Create mechanism to collect and allocate fees.	M	SS	2007	W,N	
Storm Water	10.1 Expand storm water management to include areas not incorporated in existing programs.						
		10.1.1 Develop a storm water management and water quality program for existing and new development in the County.	H	$$$,SS	2006	N/ P	
		10.1.2 Coordinate and join this program with the existing City Stormwater Management Program.	H	SS	2007	W,N	
		10.1.3 Establish a stormwater management program funding mechanism.	M	S	2007	W,N	
	10.2. Develop a City and County storm water management program that balances the financial cost between existing and new development and provides incentives for redevelopment that includes retrofits to address existing problems.						
		10.2.1 Develop a County storm water management financing program.	M	$$,S	2006	N	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		10.2.2 Coordinate and join this program with the existing City program.	M	S	2007	W,N	
		10.2.3 Ensure that there is an equitable and balanced financing program for existing and new development in the County and City.	M	S	2007	W,N	
	10.3. Protect surface water quality by prohibiting new, and eliminating existing collection systems that directly discharge storm water to surface waters, including stormwater runoff from roadways.						
		10.3.1 Identify collection systems discharging directly into surface waters.	H	$,S	2006	W,N	
		10.3.2 Create program to prohibit collection systems that directly discharge stormwater to surface waters.	H	SS	2006	W,N	
		10.3.3 Continue to seek methods to fund and construct BMP's to treat direct storm water discharge.	H	SS	2006	W,N	
	10.4. Protect water quality by ensuring that drainage from land use activities has a rate of flow and volume characteristics as near to predevelopment conditions as possible.						
		10.4.1 Develop low impact development (LID) standards that ensure that drainage from land use activities has a rate of flow and volume characteristics as near to predevelopment conditions as possible to provide for the protection of our water quality.	H	SS	2006	W,N/ P	
		10.4.2 Prepare LID standards for inclusion in the technical standards and development codes.	H	S	2007	W,N	
		10.4.3 Enforce provisions of storm water management ordinance pertaining to pre and post development conditions.	H	SS	2006	W,N	
Sewer and Water	11.1 Provide public sewer service to existing development in unincorporated areas that have inadequate and malfunctioning septic systems and package treatment plants.						
		11.1.1 Develop a Capital Facilities Plan for areas that should be provided with sewer and water services based on environmental concerns, water quality concerns and servicing costs.	H	SS	2007	W,N	
	11.2 Consolidate the City and County sewer and water system.						
		11.2.1 Develop uniform standards for the installation of utilities that are consistent throughout the County and City.	H	SS	2006	W,N	
		11.2.2 Implement the recommendations of the City/County Water and Sewer Consolidation Study Committee.	M	$$$$	2006	W,N	
	11.3 Ensure optimal use of sewage treatment facilities.						
		11.3.1 Develop fiscal and environmentally responsible strategies for the long term management and disposal of sewage sludge to utilize available nutrients without resulting in nutrient pollutant loading to streams.	H	SS	2007	W,N	
		11.3.2 Require water reuse for appropriate industrial processes.	M	S	2006	W,N	
		11.3.3 Encourage water reuse for irrigation purposes and groundwater recharge.	H	S	2006	W,N	
	11.4 Ensure the provision of sufficient, affordable water and sewer services to proposed new service centers and industrial sites in the unincorporated areas of the County.						
		11.4.1 Identify and prioritize new service centers and industrial areas.	M	S	2006	W,N/ P	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		11.4.2 On completion of the Thoroughfare Plan update, review existing zoning and development patterns to identify potential service centers where it is feasible and cost effective to provide water, sewer and other infrastructure needs.	M	S	2007	W,N/ P	
		11.4.3 Prioritize the servicing of existing and new industrial sites that are identified in the Bypass Plan and other planning efforts.	M	S	2007	W,N/ P	
		11.4.4 Incorporate priority areas in the City and County plans for service extensions.	M	SS	2007	W,N/ P., Utilities	
		11.4.5 Evaluate the need for improved procedures for sewer service allocation to new development.	H	S	2006	W,N/ P	
Education Facilities	12.1 Give priority to the maintenance and optimal use of existing education facilities.						
		12.1.1 Provide annual funding for the sustained maintenance of facilities that serve both the existing and future education needs of the community.	H	$$$$$	2006	N	
		12.1.2 Include adequate funding for maintenance and upkeep in the annual education budget.	H	$$$$$	2006	N	
		12.1.3 Ensure that education facilities in older areas of the City and County receive adequate maintenance.	H	$$$$$	2006	N	
	12.2 Locate schools in areas where they provide the maximum benefit to adjoining neighborhoods.						
		12.2.1 Determine the needs and plan for the optimal location of elementary schools and kindergartens.	H	SS	2006	N	
		12.2.2 Plan and locate schools to allow for future expansion, and to ensure better and shared use of the facilities and campus.	H	SS	2006	N	
	12.3 New schools shall be constructed by New Hanover County to maintain an adequate level of service.						
		12.3.1 Explore the use of alternative forms of financing for improving New Hanover County Schools.	H	S	2006	N	
		12.3.2 Adequately fund the New Hanover County new school facility program.	H	$$$$$	2006	N	
		12.3.3 Coordinate facilities program with the other County and City departments utilizing the capital facilities review process.	M	S	2006	N	
		12.3.4 Create a quality control program to ensure high quality construction.	M	SS	2006	N	
		12.3.5 Assure that all school children have access to high quality athletic fields, ball fields, tracks, pools, gymnasiums, outdoor playgrounds.	H	$$$$,S	2006	N	
		12.3.6 Program routine maintenance of athletic facilities and playgrounds into the school budget.	M	$$$,S	2006	N	
		12.3.7 Identify the long-term costs/implication of computer technology.	H	SS	2007	N	
		12.3.8 Anticipate needs and technological trends, and consider adaptable systems.	H	S	2007	N	
	12.4 Encourage greater coordination between the School Board and County and City government in planning and budgeting.						
		12.4.1 Coordinate new education facilities and maintenance upgrade program.	H	S	2006	N	
		12.4.2 Hold regular meetings with concerned parties for increased coordination with New Hanover County Schools, School Board and other pertinent branches of County and City government.	M	S	2006	N	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		12.4.3 Coordinate safe access to existing and new schools for automobile, bike and pedestrian transportation through the transportation planning process.	H	SS	2006	N	
Culture and Recreation Facilities	13.1 Identify economically distressed neighborhoods with inadequate facilities and prioritize for new recreation and cultural facilities.						
		13.1.1 Continue to implement, fund and join together the County and City Park Plans.	M	SS	2006	N	
		13.1.2 Prepare and Implement a joint Greenway/Open Space/Natural Areas Preservation Plan.	H	SS	2006	W,N	
		13.1.3 Develop public/private partnerships for the provision of recreation facilities.	M	S	2006	W/N	
	13.2 Recognize the downtown Wilmington area as the cultural nucleus that nurtures, supports and strengthens other cultural centers throughout the region.						
		13.2.1 Support and implement the goals and recommendations of the Wilmington Downtown Plan: Vision 2020; the Cape Fear River Corridor Plan; and Wilmington Downtown, Inc. that reinforces the cultural importance of the Downtown area.	H	$$$$,SS	2006	W	
		13.2.2 Develop additional and support existing programs that specifically promote, strengthen and support Downtown Wilmington as the regional cultural center.	M	$$$$,SS	2006	W	
		13.2.3 Determine expected future growth and needs for library facilities.	M	S	2007	N	
		13.2.4 Continue to expand and enlarge existing library facilities to maintain the current level of service to the community.	M	$$$$,SS	2007	N	
		13.2.5 Determine expected future growth and needs and formulate a long-term cultural resources development strategy.	M	S	2008	W,N	
		13.2.6 Continue to support and improve the museum facilities.	M	$$$$	2006	W,N	
		13.2.7 Investigate the feasibility of providing a performing arts center to serve the needs of the community and its surrounding area.	M	SS	2007	W,N	
		13.2.8 Encourage the provision of social and cultural opportunities for the aging population.	M	S	2006	W,N	
	13.3 Develop a joint master plan for a comprehensive system of natural areas, greenways, parks and trails throughout the City and County that meet or exceed State level of service standards for the needs of the projected population.						
		13.3.1 Prepare and implement a Countywide Greenways, Open Space and Natural Areas Preservation Plan for the establishment of a continuous Greenway System that links neighborhoods to community activity centers, and exceeds recreational and open space level of service needs for both present and expected population growth.	H	$$$$,SS	2006	W,N/ P	
		13.3.2 Establish, in the unincorporated areas, requirements for commercial and residential development to reserve land for non-recreation open space or provide a fee in lieu.	H	$,S	2006	N/P	
		13.3.3 Develop acquisition and protection options for significant open space and recreation sites, such as fee simple purchase, public/private partnerships, conservation easements and conservation trusts.	H	$$$$,SS	2006	W,N/ P	
		13.3.4 Develop a public participation process for the acquisition and preservation of significant sites for open space and recreation.	M	SS	2006	W,N	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		13.3.5 Utilize the Parks, Recreation and Open Space Planning process to identify opportunities for park land and open space in Downtown Wilmington.	H	S	2006	W/P	
		13.3.6 Allow density bonuses and flexibility in design to increase preservation of open space.	H	S	2006	W,N/ P	
		13.3.7 Apply payment-in-lieu funds to develop parks in areas where they are needed in a timely and efficient manner.	M	S	2006	W,N	
		13.3.8 Allow payment-in-lieu for smaller developments rather than requiring small non-contiguous open space.	M	S	2006	W,N	
		13.3.9 Identify funding mechanisms and pursue funds for open space acquisition and park development.	H	S	2006	W,N/ P	
	13.4 Preserve rail and utility easements as part of a greenway system and link them with trails and greenways where possible.						
		13.4.1 Identify rail and utility easements and preservation opportunities which provide linkages in the greenway system for inclusion in a Greenways, Open Space and Natural Areas Plan.	M	$,S	2006	W,N/ P	
		13.4.2 Work with rail and utility companies to identify financing mechanisms or other arrangements for the right to use these important corridors.	M	$,S	2007	W,N	
	13.5 Identify a suitable corridor and cooperate with public and private entities to develop the New Hanover County component of the East Coast Greenway.						
		13.5.1 Work with the East Coast Greenway project to identify an optimal corridor(s) through New Hanover County that include both scenic coastal byways and urban throughways.	H	S	2006	W,N/ P	
		13.5.2 Develop acquisition/protection options for routes for the East Coast Greenway such as purchase, public/private partnerships, conservation easements and conservation trusts.	H	S	2006	W,N/ P	
Police and Fire Services	14.1 Provide timely and adequate staffing and facilities to maintain and improve the level of police and fire services.						
		14.1.1 Plan and provide staffing and facilities for police and fire services at least proportionate to the growth in the community.	H	$$$,S	2006	W,N	
		14.1.2. Develop a long range plan for the location of police, fire and EMT facilities that accounts for population growth into underserved and expanding areas within the urban services area.	H	$,SS	2006	W,N	
Waste Management	15.1 Establish and maintain an environmentally responsible, cost effective system for managing solid waste that protects public health and provides adequate waste disposal capacity, solid waste collection and recycling services, and waste reduction opportunities.						
		15.1.1 The County and City, together with the Towns of Carolina Beach, Kure Beach, and Wrightsville Beach, will continue the joint update of the Comprehensive Solid Waste Management Plan every 3 years and establish programs and set goals for the management and reduction of solid waste for the next 10 years.	H	S	2006	W,N	
		15.1.2. Provide continued support for innovative waste management systems.	M	S	2006	W,N	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
	15.2 Reduce and manage the solid waste stream through efficient waste collection, expanded recycling programs, encouraging composting, expanded household hazardous waste collection and education, and multi-jurisdictional cooperation.						
		15.2.1. Expand local government provided recycling services.	M	$$$	2006	N,W	
		15.2.2 Promote local private recovery and recycling initiatives.	M	$,S	2006	N,W	
		15.2.3. Encourage composting.	M	$,S	2006	N,W	
		15.2.4. Expand household hazardous waste pick-up and education.	M	$,S	2007	N,W	
		15.2.5. Promote local construction and demolition debris recycling and recovery programs.	H	S	2006	N,W	
		15.2.6. Consider a county-wide waste collection and recycling program.	H	S	2006	N,W	
	15.3 Eliminate illegal trash dumping through strict monitoring and enforcement, including increased fines, signage program, rewards, and other means.						
		15.3.1 Identify illegal dump sites and reduce illegal trash dumping through aggressive enforcement of the illegal dumping ordinance, strict monitoring, increased fines, signage program, rewards and other means.	H	SSS	2006	N,W	
		15.3.2 Review the illegal dumping ordinance and strengthen as appropriate.	M	S	2006	N,W	
	15.4 Continue to implement and improve the County's Comprehensive Solid Waste Management Plan.						
		15.4.1. The County and City, together with the Towns of Carolina Beach, Kure Beach, and Wrightsville Beach, will continue the joint update of the Comprehensive Solid Waste Management Plan every 3 years and establish programs and set goals for the management and reduction of solid waste for the next 10 years.	M	S	2006	N,W	
Housing	**MINIMUM HOUSING PROGRAMS:**						
Demand	16.1. Enhance the minimum housing program within the City and adopt a minimum housing program with enforcement in the County.						
		16.1.1 Improve the City minimum housing enforcement program.	M	S	2006	W	
		16.1.2 Develop code enforcement strategies that emphasize improvements in housing quality and preservation recognizing a balance between expenses to property and home owners, and better living conditions for occupants.	M	SS	2006	W	
		16.1.3 Adopt a County minimum housing code and establish an enforcement program.	M	SS	2007	N	
		16.1.4 Ensure that there is strong code enforcement to remedy neighborhoods and lots with abandoned vehicles, trash, debris, and boarded up housing.	H	S	2006	W,N	
		16.1.5 Ensure adequate regulations and code enforcement staff to implement regulations.	M	S	2006	W,N	
	AFFORDABLE HOUSING PROGRAMS:						
	16.2. Support and enhance a broad range of affordable housing programs.						
		16.2.1 Develop strategies to facilitate the creation of affordable housing opportunities.	M	S	2006	W,N	
		16.2.2 Develop a program to educate the public on the need for affordable housing.	M	$,S	2007	W,N	
		162.3 Support and cooperate with the Affordable Housing Coalition.	M	S	2006	W,N	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
	16.3. Increase the supply of affordable rental housing.						
		16.3.1 Conduct a study to improve and expand the City rental rehabilitation loan program.	L	S	2007	W	
		16.3.2 Establish a County rental rehabilitation loan program.	M	$$$$	2007	N	
		16.3.3 Ensure that there is funding for a rent-to-own program in both the City and County. This program would enable a renter to apply rent payments towards the purchase of a home.	M	$$$$	2006	W,N	
		16.3.4 Explore the possibility that apartment complexes that are converted to condominiums provide affordable units, or payments into a City and County affordable housing or non-profit housing program.	L	S	2006	W,N	
	FUNDING:						
	16.4. Maximize funding opportunities from federal and state sources for community and economic development.						
		16.4.1 Consider creating a consolidated County and City Housing Program.	M	SS	2006	W,N	
	16.5 Explore alternative forms of financing for affordable housing.						
		16.5.1 Ensure that all available Federal and State community and economic development funding opportunities are being utilized.	H	S	2006	W,N	
Special Populations	**HOMELESS:**						
	17.1. Cooperate with non-profit organizations to provide temporary and transitional shelter and better job referral services to persons who are homeless.						
		17.1.1 Expand programs for homeless shelters to include adequate quality accommodations with emphasis on housing for the mentally disabled.	M	$$$,S	2006	W,N	
		17.1.2 Ensure continued funding and support for Continuum of Care and other related programs that address counseling and job referral needs to assist homeless persons and households achieve self sufficiency.	M	$$$	2006	W,N	
		17.1.3 Ensure that the areas of the City and County that have high homeless concentrations receive specific neighborhood outreach.	M	S	2006	W,N	
		17.1.4 Expand job referral programs for the homeless.	H	$$,S	2006	W,N	
	SPECIAL NEEDS AND ELDERLY:						
	17.2. Cooperate with non-profit organizations to ensure an adequate supply of housing for special needs, the elderly, and the disabled.						
		17.2.1 Establish a housing program for the special needs, elderly, and disabled, that is integrated throughout the community.	M	$$$$,SS	2007	W,N	
		17.2.2 Conduct a study to develop recommendations for a program to include group living arrangements and nursing homes for the elderly, and other special needs populations	M	SS	2007	W,N	
		17.2.3 Initiate a program to address special housing needs with the private sector.	M	$$$,SS	2006	W,N	
		17.2.4 Modify zoning regulations where appropriate to encourage housing populations with special needs such as the elderly and disabled.	M	S	2006	W,N/ P	
	UNCW AND CFCC STUDENT HOUSING:						
	17.3. Cooperate with UNC-Wilmington, and Cape Fear Community College to meet student housing needs.						

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		17.3.1 Conduct a study to identify on and off campus student housing needs for UNC-Wilmington and Cape Fear Community College.	M	S	2006	W,N	
		17.3.2 Monitor and regulate student housing in established single family neighborhoods.	L	S	2006	W,N	
	NEIGHBORHOOD ASSOCIATIONS						
	17.4. Encourage the use of neighborhood associations by the County, City, and residents for outreach information and education.						
		17.4.1 Create neighborhood guidelines.	M	S	2006	W,N	
		17.4.2 Conduct public discussion and use other methods for public outreach to address the impact of new development on adjoining neighborhoods.	M	SS	2006	W,N/ P	
		17.4.3 Prepare and distribute guidance for associations.	L	SS	2007	W,N/ P	
Economic Development							
Needs	**GENERAL ECONOMY:**						
	18.1. Develop a coordinated economic development strategy to attract high paying employers that are economically diverse and environmentally mindful.						
		18.1.1 Enhance collaboration to attract high paying diverse employers and develop an incentives program.	H	S	2006	W,N	
		18.1.2 Create a County-City economic development program. Select lead public agency or consultant to study the following items: Strengthen existing public and private programs that target businesses for expansion and job creation. Establish a Research and Development Park including infrastructure, with business connections to UNCW and CFCC. Investigate establishing a local branch of the Office of Industrial Extension Service in the County. Increase public outreach and improve awareness of the importance of business and industry to the tax base.	H	$$$$,SS	2006	W,N	
		18.1.3 Continue to support the pre-engineering cooperative education program between UNCW, NC State NC A&T, and UNC Charlotte:	L	S	2006	W,N	
		18.1.4 Take steps to promote the local film industry. § Provide incentives to attract new productions. § Meet with the Wilmington Regional Film Commission regarding continuous updates on "Film Guidelines." § Improve existing procedures for on location filmmaking with Police, Fire and government. § Create program to improve public relations with the community regarding on-location film making.	M	$$$$,S	2006	W,N	
		18.1.5 Offer incentives for companies to assist employees with high quality affordable child day care.	M	$$$$	2006	W,N	
		18.1.6 Develop a program to attract professional sports teams and events.	L	$$$$$,SS	2007	W,N	
	TOURISM:						
	18.2. Encourage tourism as part of a balanced and diversified economy.						
		18.2.1 Promote Wilmington and the County as an area for heritage and historic preservation tourism.	M	$$$,SS	2006	W,N	
		18.2.2 Support promotion of Wilmington as a recreation and tour boating destination.	M	$$$,S	2006	W	
		18.2.3 Promote the area's natural environment to support the eco-tourism industry and draw attention to our fragile ecosystem.	M	$$$,S	2006	W,N	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
	SKILLED WORKFORCE AND EDUCATION:						
	18.3 Partner with the private sector and schools to develop training to maintain an employable work force with skills to meet current and projected demands.						
		18.3.1 Enhance support for vocational education programs.	M	$$$,SS	2006	W,N	
		18.3.2 Expand the existing Dual Enrollment high school and community college program that emphasizes vocation training.	M	$$$,SS	2006	N	
		18.3.3 Expand cooperative internship programs for students.	M	$$,S	2006	W,N	
		18.3.4 Expand the Job Ready internship program between business and the New Hanover County Public Schools.	M	$$,S	2007	W,N	
		18.3.5 Expand a job skills program for the post high school aged under-prepared population.	M	$$$,S	2007	W,N	
		18.3.6 Expand and seek grants to adequately fund the Human Resources Development Program and Adult Basic Education programs for disadvantaged and dislocated workers.	M	$$$,S	2007	N	
		18.3.7 Study and consider establishing an independent Board of Education supplemental education tax to improve the quality of public school education.	M	$$$,S	2006	W,N	
		18.3.8 Address the public school drop out rate and address the needs of high school students that work excessively during the school year.	M	$$$$,SS	2005	W,N	
Opportunities	**ECONOMICALLY DISTRESSED AREAS:**						
	19.1. Cooperate with non profit and for profit organizations shall work to attract and retain business in areas that are economically distressed.						
		19.1.1 Use Community Development Block Grant funds for programs and activities that have been identified and prioritized for the degree to which they create jobs for low and moderate income persons.	M	SS	2006	W,N	
		19.1.2 Encourage and support the federal Small Business Administration HUB Zone program to attract business and jobs to the economically challenged areas of Wilmington.	M	S	2006	W,N	
		19.1.3 Encourage and support the expansion of family resource centers and programs.	M	SS	2006	W,N	
		19.1.4 Expand family resource centers and programs into distressed areas.	M	SS	2007	W,N	
		19.1.5 Create flexible regulations in the development code to encourage public and private business partnerships to develop speculative properties in economically distressed areas.	H	S	2006	W,N	
		19.1.6 Evaluate opportunities for the economic revitalization of the Greenfield Industrial Park.	H	SS	2007	W	
	WILMINGTON STATE PORT:						
	19.2. Support the continued competitiveness of the State port by achieving mutually acceptable development goals that address the need to maintain the harbor, improve inland highway and rail access, and upgrade the terminal.						
		19.2.1 Follow the recommendations of the ports Master Capital Development Plan, including, deepening the shipping channel, and upgrading the terminal.	M	$$$$$	2006	W,N,O	
		19.2.2 Follow the recommendations of the Transportation section of this Plan for improved inland highway and rail access.	L	$$$$,SS	2006	W,N	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		19.2.3 Balance the needs of the State Port with recreational boating on the Cape Fear River.	M	S	2006	W,N	
		19.2.4 Adhere to Cape Fear River Corridor Plan recommendations.	M	S	2006	W,N	
	MARINE ECONOMY:						
	19.3. Support the water dependent marine economy.						
		19.3.1 Support aquaculture research and marine technology. - Enhance promotion of environmentally friendly aquaculture research technology. - Increase financial support of the existing marine technology education program at UNCW and CFCC.	L	S	2006	W,N	
		19.3.2 Support the efforts of marine trade services for expanded boat manufacturing, and boating services such as marinas in suitable locations.	L	$$,S	2006	W,N	
		19.3.3 Address the need for more public boat slips and marinas to accommodate both local and traveling boaters.	H	$$$$$,S	2006	W,N	
	19.4. Support the continued productivity of commercial and recreational fisheries through the protection of the unique coastal ecosystems, including primary nursery areas, shellfish waters and coastal marshes upon which they depend, and the Masonboro Island Estuarine Research Reserve.						
		19.4.1 Support implementation of the Coastal Habitat Protection Plan.	H	SS	2006	W,N	
		19.4.2 Support the protection and preservation of Masonboro Island Estuarine Research Reserve: - Pursue island acquisition and preservation strategies - Support the scientific research activities of the Reserve.	H	$$$,SS	2006	N	
	WILMINGTON INTERNATIONAL AIRPORT:						
	19.5. Cooperate with the New Hanover County Airport Authority to increase the competitiveness, of the Wilmington International Airport while being mindful of the compatibility with adjacent businesses and homes.						
		19.5.1 Encourage airport economic growth and development.	M	S	2006	W,N	
		19.5.2 Support the airport master plan with regard to economic growth.	M	S	2006	W,N	
		19.5.3 Address compatibility with the Land Use and Transportation policies of this Plan.	H	S	2006	W,N	
Historic Preservation							
Historic Preservation	20.1 Cooperate with non-profit and for profit organizations to preserve, and provide regulatory and cultural guidance for historic sites and historic areas.						
		20.1.1 Update and revise existing historic district design guidelines to provide direction to the homeowners, builders and contractors, and to preserve visual and historic character in the redevelopment of downtown Wilmington.	H	SS	2006	W	
	20.2 Identify and protect important historic and archaeological resources.						
		20.2.1 Conduct a city- and county-wide historic resource survey update that identifies additional historic resources, significant areas or sites -both architectural and natural.	M	S	2007	W,N	
		20.2.2 Update existing National Register District survey to identify contributing, noncontributing resources for tax credit purposes, and demolished resources and new construction.	L	SS	2007	W,N	
		20.2.3 Develop an historic preservation plan for protection of sensitive areas and sites; or where preservation is not possible, a plan for the mitigation and recovery of historic data.	M	$$,S	2006	W,N	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		20.2.4 Offer density credits as an incentive for implementing area and site protection plans.	M	S	2006	W,N	
		20.2.5 Update current regulations to require identification of potential impacts to historic resources.	M	S	2006	W,N	
		20.2.6 Support a community archaeological program that will provide assistance to help salvage threatened land and water archaeological sites and promote public education and participation.	M	$$$,S	2007	W,N	
		20.2.7 Coordinate historic preservation efforts and public education with non-profit historic preservation groups.	M	S	2006	W,N	
	20.3 Continue the redevelopment of historic downtown Wilmington as a high priority, building on past successes and carefully matching public incentives with private investment. Care should be taken to preserve the visual character and historic atmosphere of old Wilmington.						
		20.3.1 Expand boundaries of Wilmington's local historic districts towards the north and south.	M	S	2007	W/P	
		20.3.2 Conduct reconnaissance survey with recommendations to expand the boundaries of the National Register District to encompass adjoining areas that have become eligible for inclusion.	M	S	2006	W/P	
		20.3.3 Enhance existing affordable housing programs within the historic districts.	M	$$$,S	2007	W	
		20.3.4 Adopt design guidelines and building codes to facilitate renovations in low-income areas.	M	SS	2007	W/P	
		20.3.5 Protect and maintain historic brick street pavers.	M	S	2006	W	
		20.3.6 Reference the CAMA Plan Historic Preservation Element for guidance in historic preservation issues.	M	S	2006	W,N	
		20.3.7 Initiate the establishment of Conservation Districts and conduct public education.	M	S	2006	W,N	
		20.3.8 Establish local historic districts in early 20th-century neighborhoods such as Forest Hills and Sunset Park.	M	S	2006	W	
		20.3.9 Use guidelines created by other county jurisdictions as a model to establish a County Historic Preservation Commission to identify historic structures and develop historic resource design guidelines that pertain to districts and landmarks.	H	SS	2006	N	
Storm and Natural Hazards							
Land Use and Safety	21.1 Assess measures to respond to a hurricane or other natural disaster to safeguard future populations from development which may put increased numbers of people at risk in hazard incidents.						
		21.1.1 Discourage high intensity uses and large structures from being constructed within the 100 year floodplain (1% annual chance floodplain), erosion prone areas, and other locations susceptible to hurricane and flooding hazards.	H	SS	2006	W,N/ P	
		21.1.2 Enforce current zoning and subdivision regulations regarding development in the floodplain.	H	SS	2006	W,N/ P	
		21.1.3 Following a storm event, take advantage of opportunities to acquire or purchase land located in storm hazard areas which are rendered unbuildable or have sustained substantial damage. The property should satisfy objectives including, but not limited to the conservation of open space and scenic areas, and the provision of public water access.	H	$$$$,S	2006	W,N/ P	
		21.1.4 Review repetitive loss properties; apply for grant funding when available.	H	SS	2006	W,N/ P	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
		21.1.5 Follow recommendations of Project Impact and Hazard Mitigation Planning Initiative.	M	SS	2006	W,N/ P	
		21.1.6 Identify areas impacted by hazards.	H	S	2006	W,N/ P	
		21.1.7 Declare a moratorium on the acceptance of any request for rezoning in flood prone areas other than for rezoning to a less intense use.	H	S	2006	W,N/ P	
		21.1.8 Declare a moratorium on the permitting of any new construction, new utility hook-ups, or redevelopment construction that would increase the intensity of the land uses existing in disaster prone areas.	H	S	2006	W,N/ P	
		21.1.9 Request that new assessments of hazard areas be performed periodically, due to the changes to the floodplain, shoreline and inlets caused by natural and man made forces.	H	S	2007	W,N/ P	
	21.2 Limit density to 2.5 units / acre or less in conservation areas (100 year, or 1% annual chance floodplain).						
		21.2.1 Continue enforcing the limit as specified in the code.	H	S	2006	W,N/ P	
		21.2.2 Develop a program for density tradeoffs to encourage development outside of floodplain.	H	SS	2006	W,N/ P	
Government Response	22.1 Appoint a Recovery Task Force, as needed, with the responsibility for directing reconstruction within New Hanover County after a damaging storm.						
		22.1.1 The Task Force shall be responsible for assessing storm damages and impacts and advising the Board of the County Commissioners on a diverse range of post-storm issues.	H	$$,S	2006	W,N	
		22.1.2 A building moratorium may be authorized or extended by the Recovery Task Force through a resolution by the Board of County Commissioners and/or City Council.	H	S	2006	W,N	
		22.1.3 The City and County shall closely monitor all reconstruction efforts involving both public and private utilities, including roads, to provide for less vulnerable redevelopment after a hurricane.	H	$$,S	2006	W,N	
		22.1.4 Planning and Inspections department review process must be in tact and ready to respond in case of hazard event. Follow recommendations of Project Impact and Hazard Mitigation Planning Initiative.	H	$$,SS	2006	W,N	
	22.2 Retain on a seasonal basis an assistance facilitator/consultant who, as directed by the County Manager, will be responsible for making recommendations and coordinating assistance to elected officials, the Recovery Task Force and the citizenry in the event of a Natural Hazard occurrence.						
		22.2.1 The assistance facilitator / consultant will be charged by the County Manager with the following tasks: - Determining the types of assistance available to the City and County and the type of assistance most needed. - Assisting in the coordination of federal disaster recovery effort. - Coordinate State and Federal programs of assistance. - Informing the citizenry of the types of assistance programs available. - Recommending to the Recovery Task Force and Board of Commissioners programs which are available and then acting as facilitator in securing those programs.	H	$$$,S	ongoing	W	

Section / CAMA Issues	2005 Plan Policies	Implementation Strategies	Priority	Resources	Start Fiscal Year	Responsibility	Status
	22.3 Immediately restore services and remove and clean up debris following a major storm event.						
		22.3.1 The City and County shall be responsible for the overall supervision of cleanup and disposal of debris resulting from an intense storm event.	H	$$$$,SS	ongoing	W,N	
		22.3.2 In hurricane damaged areas, give priority to those repairs that restore service to the greatest number of people.	H	S	ongoing	W,N	
		22.3.3 Where economically feasible replace or relocate public utilities that have sustained major damage due to a hurricane storm event, away from hurricane hazard areas or strengthen their construction.	H	$$$$$,S	ongoing	W,N	
		22.3.4 Perform damage assessment, determine facilities that should be replaced, seek grants or other funding, relocate facilities.	H	$$$$,SS	ongoing	W,N	
		22.3.5 Follow recommendations in the All Hazard Mitigation Plan.	H	S	ongoing	W,N	
		22.3.6 The North Carolina Department of Transportation (NCDOT) will be responsible for the removal and clean up debris from State maintained roads immediately following a major storm event.	H	S	ongoing	DOT	
		22.3.7 Develop a strategy to include funding for expediting the onset and completion of disaster recovery and debris removal following a storm.	H	S	2006	W,N	
		22.3.8 The City of Wilmington will be responsible for the clean-up of City streets.	H	$$$$,SS	ongoing	W	
		22.3.9 Private development homeowners will be responsible for the clean-up of debris on private roads, or public roads not yet accepted by NCDOT.	H	S	ongoing	W,N	