

Appendix C

USEPA Land Cover Data

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The land cover data set used in this report was developed by the Landscape Characterization Branch of the US Environmental Protection Agency (EPA). The detailed land cover classes are listed in Table C.1, followed by a description of the classes.

Table C.1 Neuse River Basin Land Cover Classification.

Level 1	Level 2	Level 3
1.0 Urban (Percent Impervious)	1.1. High Density (71-100%)	
	1.2. Medium Density (36-70%)	1.2.2. Agricultural Land
		1.2.3. Woody Vegetation
		1.2.4. Herbaceous Vegetation
		1.2.5. Water
		1.2.6. Wetlands
		1.2.7. Barren Land
		1.3. Low Density (10 - 35%)
		1.3.3. Woody Vegetation
		1.3.4. Herbaceous Vegetation
		1.3.5. Water
		1.3.6. Wetlands
		1.3.7. Barren Land
2.0 Agricultural Land	2.1. Row Crops	2.1.1. Cotton
		2.1.2. Corn
		2.1.3. Soybeans
		2.1.4. Tobacco
	2.2. Pasture/Hay	
	2.3. Fallow Field	
3.0 Woody Vegetation	3.1. Deciduous	
	3.2. Evergreen	
	3.3. Mixed	
4.0 Herbaceous Vegetation	4.1. Natural Grasslands	
	4.2. Maintained Grasslands	
5.0 Water	5.1. Streams, Rivers, and Canals	
	5.3. Reservoirs	
	5.4. Estuaries	
	5.5. Ponds	
6.0 Wetlands	6.1. Herbaceous	
	6.2. Woody	
7.0 Barren Land	7.1. Non-vegetated	
	7.2. Transitional (Pioneer Vegetation)	
8.0 Unknown/Other		

NEUSE RIVER BASIN CLASS DEFINITIONS

1.0 Urban or Built-up

- 1.1 High Density - Includes heavily built-up urban centers and large constructed surfaces in suburban and rural areas with a variety of different land uses. Contains areas which are equal to or greater than 71 percent of the land area is covered by concrete and asphalt or other constructed materials. Examples of such areas include apartment complexes, skyscrapers, shopping centers, factories, industrial complexes, airport runways, and interstate highways.
- 1.2 Medium Density - Includes built-up urban centers and large constructed surfaces in suburban and rural areas with a variety of different land uses. Contains areas in which 36 to 70 percent of the land area is covered by buildings, roads, or other constructed materials. Examples of such areas include apartment complexes and low density commercial areas.
- 1.3 Low Intensity - Includes suburban and rural areas with a variety of different land uses. Contains areas in which 10 percent to 35 percent of the land area is covered by buildings, roads, or other constructed materials. Examples of such areas include residential areas and subdivisions.

2.0 Agricultural Land

- 2.1 Row Crops and Small Grains - areas dominated with vegetation which has been planted in its current location by humans, and/or is treated with annual tillage, a modified conservation tillage, or other intensive management or manipulation. The majority of vegetation in these areas is used for the production of crops, such as corn, soybeans, vegetables, tobacco, cotton, wheat, and rice.

3.0 Woody Vegetation

- 3.1 Deciduous - areas with greater than 50 percent total shrub or tree cover in which 70 percent or greater of the shrub or tree cover present is characterized by individuals that simultaneously shed their foliage in response to an unfavorable season. Includes areas of forested and shrubland vegetation planted by humans in developed settings for the production of wood pulp, fruit, or other products.
- 3.2 Evergreen - areas with greater than 50 percent total shrub or tree cover in which 70 percent or greater of the shrub or tree cover present is characterized by individuals that maintain their leaves all year. Canopy is never without green foliage. Includes areas of forested and shrubland vegetation planted by humans in developed settings for the production of wood pulp, fruit, or other products.
- 3.3 Mixed - areas with greater than 50 percent total shrub or tree in which neither evergreen nor deciduous cover alone makes up 70 percent of the shrub or tree cover present. Includes areas of forested and shrubland vegetation planted by humans in developed settings for the production of wood pulp, fruit, or other products.

4.0 Herbaceous Vegetation

- 4.1 Grasslands - areas of herbaceous vegetation that is not maintained by humans -- natural grasslands.
- 4.2 Pasture - areas of herbaceous vegetation planted by humans in developed settings or for livestock grazing.
- 4.3 Maintained Lawns - Includes areas composed of grassy ground cover which is maintained for a specific use. Examples of such areas include golf courses, large lawns, and cemeteries.

5.0 Water

- 5.1 Streams, Rivers, Canals - natural or man-made bodies of running water.
- 5.2 Lakes - non-saline bodies of open, non-running water which are greater than four hectares in area.
- 5.3 Reservoirs - man-made and maintained bodies of water constructed for the purpose of providing water to settlements.

5.4 Estuaries - Consists of deep water, tidal habitats and adjacent tidal wetlands that are usually semi-enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which the ocean water is, at least occasionally, diluted by fresh water runoff from the land

5.5 Ponds - non-saline bodies of open, non-running water, which are between 0.4 and 4.0 hectares in area.

6.0 Wetland

6.1 Emergent and Floating B wetlands characterized by a predominance of floating and/or emergent herbaceous vegetation.

6.2 Woody - areas of forest and shrubland vegetation where the soil or substrate is periodically saturated with or covered with water.

7.0 Barren Land

7.1 Non-vegetated (Mines, Quarries, Gravel Pits, Exposed Rock, Sand, and Soil) - includes areas of bedrock, desert pavement, scarps, talus, slides, volcanic material, glacial debris, and other accumulations of rock without vegetative cover, with the exception of such rock exposures in tundra regions. Includes areas of extractive mining activities with significant surface expression. Also areas within planted or cultivated regions that have been tilled or plowed and do not exhibit any visible cover of vegetation.

7.2 Transitional B Areas of sparse vegetation cover (< 20 percent) that are likely to change or be converted to other land-cover categories in the near future; includes clear-cuts.

8.0 Other/Unknown - areas which do not fit into any of the above categories