12.1 Subbasin Overview

Subbasin 03-04-12 at a Glance

Land and Water Area

Total area:	183 mi^2
Land area:	183 mi^2
Water area:	0 mi^2

Population Statistics

2000 Est. Pop.:	39,007 people
Pop. Density:	180 persons / mi^2

Land Cover (percent)

Forest / Wetland:	51.7
Surface Water:	1.1
Urban:	4.1
Cultivated Crop:	41.0
Pasture / Managed Herbaceous:	2.1

Counties
Johnston and Wayne

Municipalities
Goldsboro and Princeton

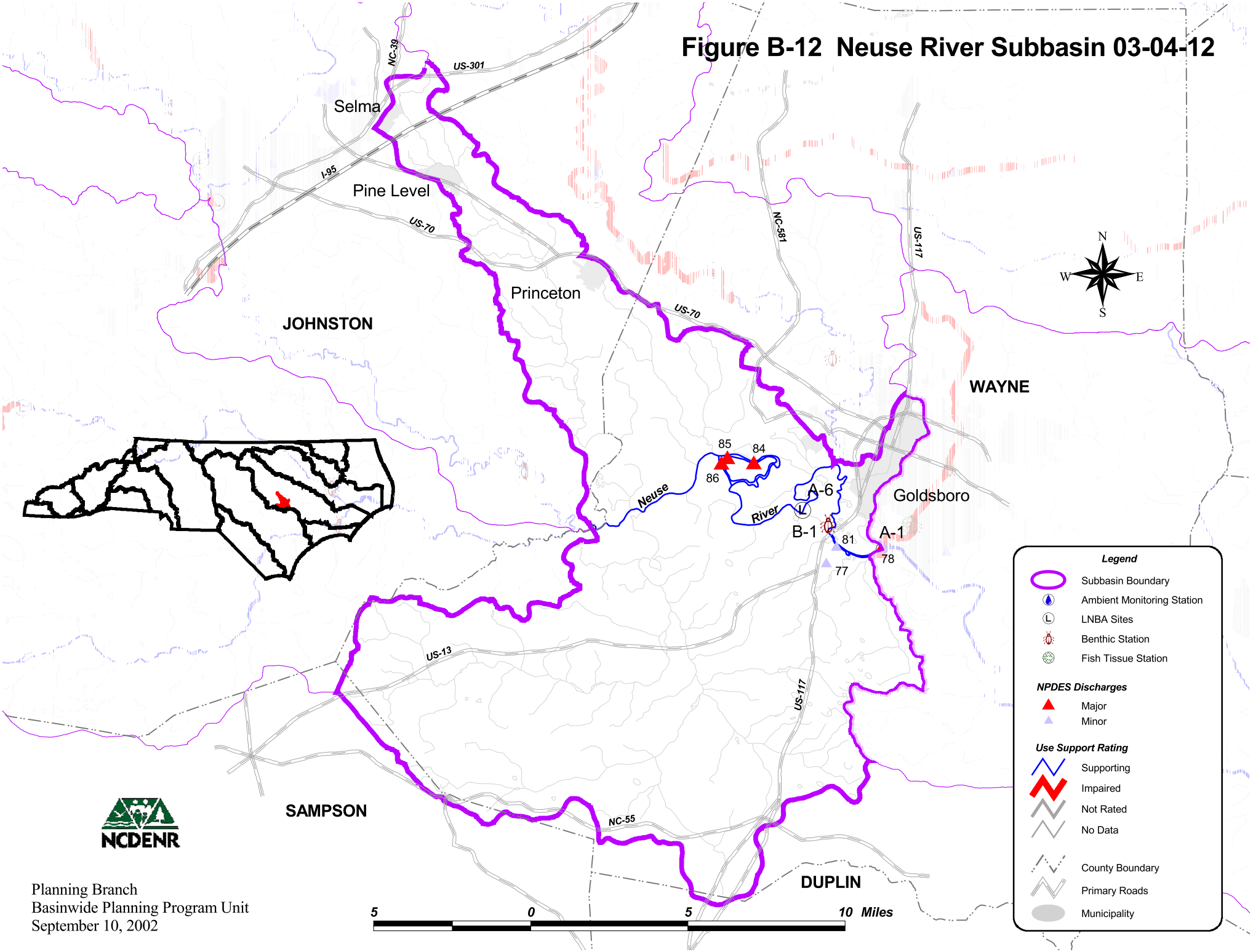
Population growth in the subbasin is concentrated around Goldsboro. Land use in this subbasin is mostly agriculture except around Goldsboro. There are 837 acres of managed public lands in this subbasin mostly associated with the Cherry Farms Game Lands.

There are four NPDES wastewater discharge permits in this subbasin with a total permitted flow of 12.9 MGD (Figure B-12). The largest is the Goldsboro WWTP (10.8 MGD). Refer to Appendix I for identification and more information on individual NPDES permit holders. Goldsboro and Wayne County will be required to develop a stormwater program under Phase II (page 76) and have submitted model stormwater ordinances as required by the Neuse NSW strategy stormwater requirements (page 64). There are also 66 registered animal operations in this subbasin.

There was one benthic macroinvertebrate community sample (Figure B-12 and Table B-34) collected in 2000 as part of basinwide monitoring. This site was unchanged from previous bioclassifications. There were 21 fish tissue samples collected in the Neuse River at Goldsboro. None of the samples had metals above USEPA, USFDA and North Carolina criteria. Refer to *2001 Neuse River Basinwide Assessment Report* at http://www.esb.enr.state.nc.us/bar.html and Section A, Chapter 3 for more information on monitoring.

Use support ratings are summarized in Part 12.2 below. Recommendations, current status and future recommendations for waters that were impaired in 1998 are discussed in Part 12.3 below. Current status and future recommendations for newly impaired waters are discussed in Part 12.4 below. Supporting waters with noted water quality impacts are discussed in Part 12.5 below. Water quality issues related to the entire subbasin are discussed in Part 12.6. Unless otherwise noted, all discussions are for the aquatic life and secondary recreation use support category. Refer to Appendix III for a complete list of monitored waters by use support category and more information on supporting monitored waters.

Figure B-12 Neuse River Subbasin 03-04-12



NCDENR

Planning Branch
Basinwide Planning Program Unit
September 10, 2002

Table B-34 DWQ Monitoring in Subbasin 03-04-12

Benthic Macroinvertebrate Community Monitoring Sites					
Map #[1]	**Waterbody**	**County**	**Location**	**1995**	**2000**
B-1	Neuse R[2]	Wayne	US 117	Good-Fair	Good-Fair
Ambient Monitoring Sites					
Map #[1]	**Waterbody**	**County**	**Location**	**Station #**	**Noted Parameters[3]**
A-1	Neuse R	Wayne	SR 1915	J5970000	---

[1] B = benthic macroinvertebrates; F = fish community; A = ambient monitoring station; SB = benthic macroinvertebrates special study site; and SF = fish community special study site.

[2] Historical data available at this site. Refer to Appendix II.

[3] Parameters are noted if in excess of state standards in greater than 10 percent of all samples.

12.2 Use Support Summary

Use support ratings (page 54) in subbasin 03-04-12 were assigned for aquatic life and secondary recreation, fish consumption and water supply. All waters in the subbasin are considered impaired on an evaluated basis because of fish consumption advisories (page 93). All water supply waters are supporting on an evaluated basis based on reports from DEH regional water treatment consultants.

There were 24.8 stream miles (16 percent) monitored during this assessment period. None of the monitored stream miles are impaired. Refer to Table B-35 for a summary of use support ratings by use support category for waters in the subbasin. Use support ratings for waters that were monitored and impaired in at least one use support category or were impaired in 1998 are presented in Table B-36.

Table B-35 Summary of Use Support Ratings by Use Support Category in Subbasin 03-04-12

Use Support Rating	Basis	Aquatic Life and Secondary Recreation	Fish Consumption	Primary Recreation	Water Supply
Supporting	Monitored	24.8 mi	0	0	0
	All Waters	24.8 mi	0	0	93.3 mi
Impaired	Monitored	**0**	**5.8 mi**	0	0
	All Waters	0	152.4 mi	0	0
Not Rated	Monitored	0	0	0	0
No Data	N/A	127.6 mi	0	4.7 mi	0
Total	Monitored	24.8 mi	5.8 mi	0	0
	All Waters	152.4 mi	152.4 mi	4.7 mi	93.3 mi
	Percent Monitored	16.3% mi	3.8%	0% mi	0%

Note: All waters include monitored, evaluated and waters that were not assessed.

Table B-36 Previously or Currently Impaired Waters in Subbasin 03-04-12

Name	1998 Status	2002 Status	Use Support Category	Miles
Neuse River		Impaired	Fish Consumption	5.8
			Total 2002 Impaired Miles	**5.8**

12.3 Status and Recommendations of Previously Impaired Waters

There were no impaired streams identified in the 1998 basin plan in this subbasin.

12.4 Status and Recommendations of Waters Newly Impaired Waters

There are no newly impaired waters in subbasin 03-04-12. Refer to Part 12.5 below for information on waters with noted water quality impacts. Refer to page 93 for more information on fish consumption use support in the Neuse River.

12.5 Status and Recommendations for Waters with Noted Impacts

The surface waters discussed in this section are supporting designated uses (unless otherwise noted) based on DWQ's use support assessment and are not considered to be impaired. However, notable water quality problems and concerns have been documented for some waters based on this assessment. While these waters are not considered impaired, attention and resources should be focused on these waters to prevent additional degradation or facilitate water quality improvement.

12.5.1 Neuse River

Current Status and 2002 Recommendations
The Neuse River in this subbasin is currently supporting based on a Good-Fair bioclassification at site B-1. The Wayne County Genoa WWTP (map #81) and BMCA Goldsboro (map #77) have had past aquatic toxicity failures. DWQ will continue to work with these discharges to assure that water quality impacts are minimized.

12.6 Additional Water Quality Issues Within Subbasin 03-04-12

This section discusses issues that may threaten water quality in the subbasin that are not specific to particular streams, lakes or reservoirs. The issues discussed may be related to waters near certain land use activities or within proximity to different pollution sources.

12.6.1 Impacts of Post-Hurricane De-Snagging on Instream Habitats

Many streams in the subbasin have noted impacts from the recent hurricanes. The biological community in the streams can recover rapidly if instream habitat is maintained. De-snagging operations should carefully remove debris from stream channels to restore natural flow and leave enough instream habitats so the biological community can recover. Refer to page 86 for more information on this issue.