

Section B: Chapter 17

Yadkin-Pee Dee River Subbasin 03-07-17

Includes the Jones Creek Watershed

17.1 Water Quality Overview

Subbasin 03-07-17 at a Glance

Total Water Miles and Acres

Stream miles:	120.4
Lake acres:	83.2

Land Cover (%)

Forest / Wetland:	79.2
Surface Water:	0.6
Urban:	0.9
Cultivated Crop:	8.4
Pasture / Managed Herbaceous:	10.8

This subbasin primarily consists of the Jones and Deadfall Creek watersheds near the state's border with South Carolina. Jones Creek flows generally east into the Pee Dee River in subbasin 03-07-16. Deadfall Creek flows south into South Carolina. The area is almost completely within Anson County. Portions of Wadesboro, Lilesville and Morven are the only municipalities.

A map including the locations of NPDES discharges and water quality monitoring stations is presented in Figure B-18. Table B-34 contains a summary of monitoring data types, locations and results. Use support ratings for waters in this subbasin are summarized in Table B-35. Appendix I provides a key to discharge identification numbers. Refer

to Appendix III for a complete listing of monitored waters and more information about use support ratings.

Nearly 80 percent of the land is forested and there are almost equal portions of pasture and cultivated cropland. Less than 1 percent of the land is described as urban. The area is still rural in nature and projected population growth between 2000 and 2020 is less than 10 percent.

There are no NPDES permitted discharges and five registered animal operations in the subbasin; all of which are swine. Swine production increased dramatically in the mid-to-late 1990s and poultry production increased modestly as well.

Water quality in this subbasin is generally good. There are some areas where impacts have been observed. The headwaters of North Fork Jones Creek draining to Wadesboro City Pond are the only waters currently classified as High Quality Waters. However, data indicate that South Fork Jones Creek qualifies for this more protective classification.

Figure B-18 Yadkin-Pee Dee River Subbasin 03-07-17

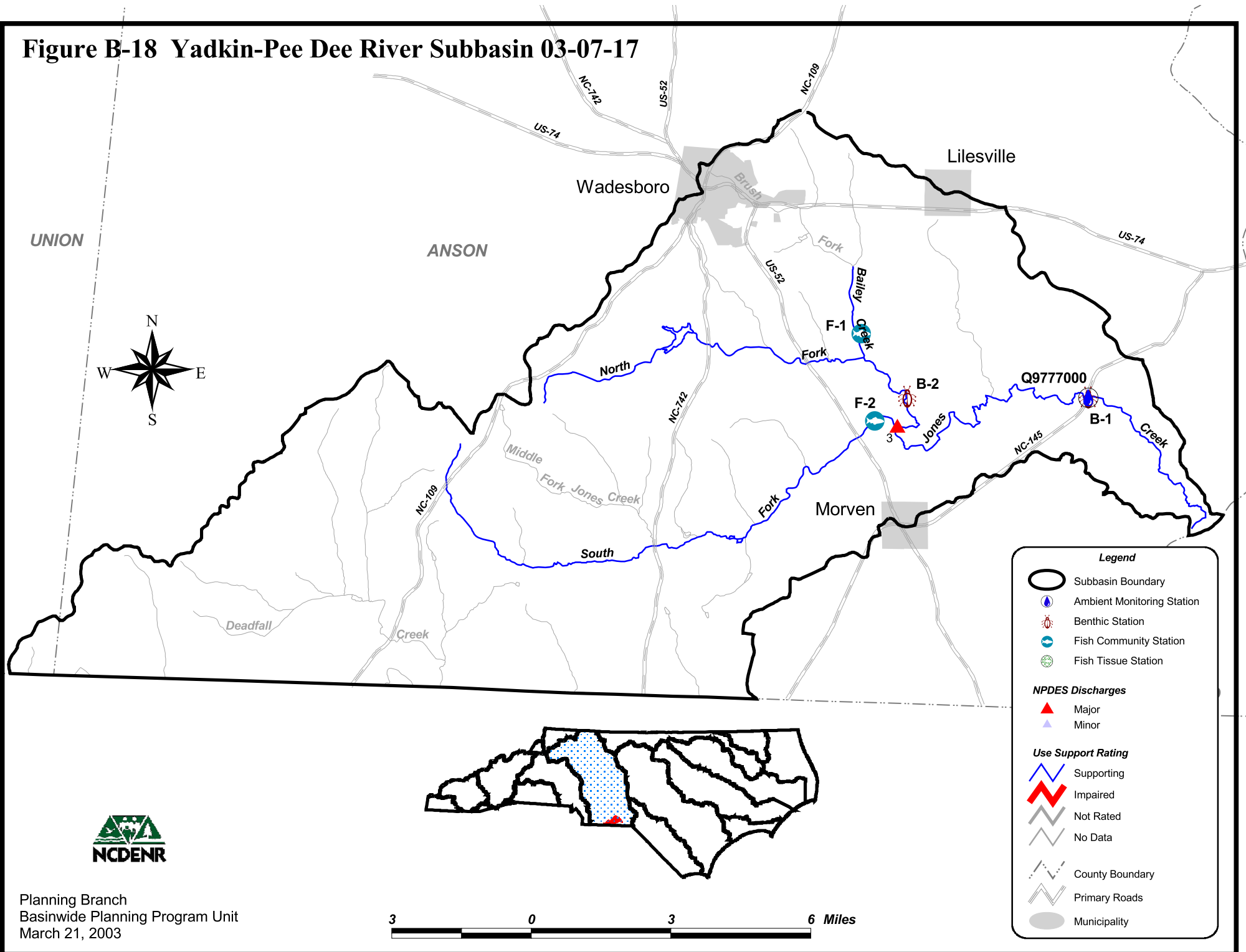


Table B-34 DWQ Monitoring Locations, Bioclassifications and Notable Chemical Parameters (1998-2002) for Yadkin-Pee Dee River Subbasin 03-07-17

Site	Stream	County	Road	Bioclassification or Noted Parameter ²
<i>Benthic Macroinvertebrate Community Monitoring</i>				
B-1	Jones Creek ¹	Anson	NC 145	Good-Fair
B-2	North Fork Jones Cr ¹	Anson	SR 1121	Good-Fair
<i>Fish Community Monitoring</i>				
F-1	Bailey Creek ¹	Anson	SR 1811	Good
F-2	South Fork Jones Cr	Anson	SR 1821	Excellent
<i>Ambient Monitoring</i>				
Q9777000	Jones Creek	Anson	NC 145	None
<i>Lakes Assessment</i>				
--	Wadesboro City Pond	Anson	2 stations	None

¹ Historical data of this type are available for this waterbody; refer to Appendix II. Sites may vary.

² Parameters are noted if in excess of state standards in more than 10 percent of samples collected within the assessment period (9/1996-8/2001).

For more detailed information on sampling and assessment of streams in this subbasin, refer to the *Basinwide Assessment Report - Yadkin-Pee Dee River Basin* (NCDENR-DWQ, June 2002), available from DWQ Environmental Sciences Branch at <http://www.esb.enr.state.nc.us/bar.html> or by calling (919) 733-9960.

Table B-35 Use Support Ratings Summary (2002) for Monitored and Evaluated Freshwater Streams (miles) and Lakes (acres) in Yadkin-Pee Dee River Subbasin 03-07-17

Use Support Category	Units	Supporting	Impaired	Not Rated	No Data	Total ¹
Aquatic Life/Secondary Recreation	miles	62.3	0.0	0.6	57.5	120.4
	acres	0.0	0.0	76.2	7.0	83.2
Fish Consumption²	miles	0.0	120.4	0.0	0.0	120.4
	acres	0.0	83.2	0.0	0.0	83.2
Primary Recreation	miles	0.0	0.0	0.0	0.0	0.0
	acres	0.0	0.0	0.0	0.0	0.0
Water Supply	miles	3.4	0.0	0.0	0.0	3.4
	acres	76.2	0.0	0.0	0.0	76.2

¹ Total stream miles/acres assigned to each use support category in this subbasin. Column is not additive because some stream miles are assigned to more than one category.

² These waters are impaired based on fish consumption advice issued for three species of freshwater fish due to mercury contamination. Refer to page 104 of Section A for details.

17.2 Status and Recommendations for Previously Impaired Waters

This section reviews use support and recommendations detailed in the 1998 basinwide plan, reports status of progress, gives recommendations for the next five-year cycle, and outlines current projects aimed at improving water quality for each water. The 1998 Yadkin-Pee Dee River basin plan identified two Impaired waters in this subbasin. Portions of North and South Forks Jones Creek are discussed below.

17.2.1 North Fork Jones Creek (8.4 miles from Wadesboro City Pond to Jones Creek)

1998 Recommendations

The 1998 basin plan discusses low flow and suggests that North Fork Jones Creek has little capacity to assimilate wastewater. Recommendations are for extensive data collection in the event that a NPDES discharge permit is proposed. The plan also recommends more widespread implementation of BMPs to control nonpoint source pollution in the watershed.

Status of Progress

Benthic macroinvertebrates were sampled in 2001 near the confluence with Jones Creek and received a Good-Fair bioclassification. The improvement in benthic macroinvertebrate bioclassification between 1996 and 2001 is likely due to reduced nonpoint source pollution as a result of the extended drought. There are no NPDES permitted discharges into North Fork Jones Creek.

Water Quality Improvement Initiatives

The North Fork Jones Creek watershed, including Bailey Creek (03040201 020020), is one of 55 watersheds in the Yadkin-Pee Dee River basin that has been identified by the NC Wetlands Restoration Program (NCWRP) as an area with the greatest need and opportunity for stream and wetland restoration efforts. This watershed will be given higher priority than a nontargeted watershed for the implementation of NCWRP restoration projects. Refer to page 278 in Section C for details.

17.2.2 South Fork Jones Creek (0.8 miles from SR 1821 to Jones Creek)

1998 Recommendations

The 1998 basin plan discusses low flow and suggests that South Fork Jones Creek has little capacity to assimilate wastewater. Recommendations are for extensive data collection in the event that a NPDES discharge permit is proposed. The plan also recommends more widespread implementation of BMPs to control nonpoint source pollution in the watershed.

Status of Progress

In 1995, the Anson County WWTP discharge was relocated to the Pee Dee River. The fish community of South Fork Jones Creek received an Excellent bioclassification in 2001. The stream is currently Supporting designated uses.

17.3 Status and Recommendations for Newly Impaired Waters

No waters in subbasin 03-07-17 are Impaired based on recent DWQ monitoring (1998-2001); however, some impacts to water quality were observed. Refer to Part 17.5 below for further discussion of potential water quality problems.

17.4 Section 303(d) Listed Waters

Portions of North Fork and South Fork Jones Creek (discussed above) are currently listed on the state's draft 2002 303(d) list. Appendix IV contains more information on the 303(d) list and listing requirements.

17.5 Status and Recommendations for Waters with Notable Impacts

Based on DWQ's most recent use support assessment, the surface waters discussed below are not Impaired. However, notable water quality impacts were documented. While these waters are not considered Impaired, attention and resources should be focused on them over the next basinwide planning cycle to prevent additional degradation or facilitate water quality improvement. A discussion of how impairment is determined can be found in Appendix III.

Although no action is required for these streams, voluntary implementation of BMPs is encouraged and continued monitoring is recommended. DWQ will notify local agencies and others of water quality concerns discussed below and work with them to conduct further monitoring and to locate sources of water quality protection funding. Additionally, education on local water quality issues is always a useful tool to prevent water quality problems and to promote restoration efforts. Nonpoint source agency contacts are listed in Appendix VI.

17.5.1 Brush Fork

Brush Fork is a major tributary to Bailey Creek in the North Fork Jones Creek watershed. Although the fish community of Bailey Creek near the confluence with North Fork Jones Creek received a Good bioclassification in 2001, habitat degradation and some nutrient enrichment were observed. These impacts are likely being passed down from Brush Fork higher in the watershed. The headwaters of Brush Fork are almost completely developed in the Town of Wadesboro, and more land is being developed along highway corridors: NC 109, US 52 and US 74. In addition to impacts from stormwater in the watershed, there are likely impacts from historical wastewater collection system failures. However, Wadesboro recently completed a large collection system rehabilitation project that will reduce these impacts in the future.

The North Fork Jones Creek watershed, including Brush Fork and Bailey Creek (03040201 020020), is one of 55 watersheds in the Yadkin-Pee Dee River basin that has been identified by the NC Wetlands Restoration Program (NCWRP) as an area with the greatest need and opportunity for stream and wetland restoration efforts. This watershed will be given higher priority than a nontargeted watershed for the implementation of NCWRP restoration projects. Refer to page 278 in Section C for details.