

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: BROWNS CRK AT NC 87 NR ELIZABETHTOWN

Station #: B8340050

Hydrologic Unit Code: 03030005

Latitude: 34.61403

Longitude: -78.58475

Stream class: C

Agency: LCFRP

NC stream index: 18-45

Time period: 01/18/2006 to 12/01/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--|----------------|--------------------|--------------------|------------------------|-----|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 59 | 0 | <4 | 0 | 0 | | 5.6 | 7.1 | 7.5 | 8.3 | 10.1 | 11.7 | 17 |
| | 59 | 0 | <5 | 0 | 0 | | 5.6 | 7.1 | 7.5 | 8.3 | 10.1 | 11.7 | 17 |
| pH (SU) | 60 | 0 | <6 | 2 | 3.3 | | 5.9 | 6.3 | 6.5 | 6.8 | 7 | 7 | 7.1 |
| | 60 | 0 | >9 | 0 | 0 | | 5.9 | 6.3 | 6.5 | 6.8 | 7 | 7 | 7.1 |
| Spec. conductance (umhos/cm at 25°C) | 60 | 4 | N/A | | | | 78 | 91 | 100 | 110 | 123 | 148 | 165 |
| Water Temperature (°C) | 60 | 0 | >32 | 0 | 0 | | 2.1 | 7.6 | 12.3 | 18.4 | 22.6 | 24.7 | 27.4 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 11 | N/A | | | | 2 | 2 | 2.8 | 4 | 10 | 18.9 | 105 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 2 | N/A | | | | 0.01 | 0.01 | 0.02 | 0.03 | 0.04 | 0.06 | 0.14 |
| NO2 + NO3 as N | 60 | 1 | N/A | | | | 0.02 | 0.05 | 0.13 | 0.22 | 0.37 | 0.63 | 1.1 |
| TKN as N | 60 | 3 | N/A | | | | 0.2 | 0.21 | 0.44 | 0.6 | 0.8 | 1.38 | 2.2 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.04 | 0.05 | 0.06 | 0.09 | 0.11 | 0.19 | 0.4 |
| Fecal Coliform Screening(#/100mL) | | | | | | | | | | | | | |
| # results: | Geomean | # > 400: | % > 400: | %Conf: | | | | | | | | | |
| 60 | 206.1 | 14 | 23.3 | 79.3 | | | | | | | | | |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: HAMMOND CRK AT SR 1704 NR MOUNT OLIVE

Station #: B8340200

Hydrologic Unit Code: 03030005

Latitude: 34.56896

Longitude: -78.55225

Stream class: C

Agency: LCFRP

NC stream index: 18-50

Time period: 01/18/2006 to 12/01/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--|----------------|--------------------|--------------------|------------------------|------|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 59 | 0 | <4 | 6 | 10.2 | 62.3 | 2.9 | 3.9 | 5.5 | 7.2 | 9 | 11.5 | 17.5 |
| | 59 | 0 | <5 | 11 | 18.6 | >99.9 | 2.9 | 3.9 | 5.5 | 7.2 | 9 | 11.5 | 17.5 |
| pH (SU) | 60 | 0 | <6 | 1 | 1.7 | | 5.9 | 6.4 | 6.6 | 6.9 | 7 | 7.2 | 7.4 |
| | 60 | 0 | >9 | 0 | 0 | | 5.9 | 6.4 | 6.6 | 6.9 | 7 | 7.2 | 7.4 |
| Spec. conductance (umhos/cm at 25°C) | 60 | 3 | N/A | | | | 71 | 100 | 118 | 162 | 214 | 241 | 251 |
| Water Temperature (°C) | 60 | 0 | >32 | 0 | 0 | | 2.4 | 6.7 | 10.3 | 17.5 | 21.4 | 24.4 | 25.8 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 7 | N/A | | | | 2 | 2 | 3 | 4 | 5.8 | 10.9 | 30 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 6 | N/A | | | | 0.01 | 0.01 | 0.02 | 0.04 | 0.07 | 0.17 | 0.51 |
| NO2 + NO3 as N | 60 | 10 | N/A | | | | 0.02 | 0.02 | 0.04 | 0.11 | 0.3 | 0.41 | 1.36 |
| TKN as N | 60 | 3 | N/A | | | | 0.2 | 0.2 | 0.4 | 0.6 | 0.8 | 1.19 | 1.9 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.05 | 0.06 | 0.09 | 0.14 | 0.18 | 0.21 | 0.37 |
| Fecal Coliform Screening(#/100mL) | | | | | | | | | | | | | |
| # results: | Geomean | # > 400: | % > 400: | %Conf: | | | | | | | | | |
| 60 | 217 | 17 | 28.3 | 95.7 | | | | | | | | | |

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Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: CAPE FEAR RIV AT NC 11 NR EAST ARCADIA

Station #: B8360000

Hydrologic Unit Code: 03030005

Latitude: 34.39687

Longitude: -78.26752

Stream class: WS-IV Sw

Agency: LCFRP

NC stream index: 18-(59)

Time period: 01/11/2006 to 12/09/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|--------|------------------------|------|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 278 | 0 | N/A | | | | 4.5 | 6.1 | 6.6 | 7.6 | 9.3 | 10.7 | 12.7 |
| pH (SU) | 278 | 0 | <4.3 | 0 | 0 | | 5.9 | 6.5 | 6.6 | 6.7 | 6.9 | 7.1 | 8 |
| | 278 | 0 | >9 | 0 | 0 | | 5.9 | 6.5 | 6.6 | 6.7 | 6.9 | 7.1 | 8 |
| Spec. conductance (umhos/cm at 25°C) | 278 | 15 | N/A | | | | 55 | 99 | 107 | 120 | 139 | 170 | 235 |
| Water Temperature (°C) | 278 | 0 | >32 | 0 | 0 | | 4.4 | 10.4 | 16.1 | 24.4 | 28.5 | 30 | 31.6 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 0 | N/A | | | | 3 | 5 | 7 | 9 | 16.5 | 28.8 | 96 |
| Turbidity (NTU) | 59 | 0 | >50 | 2 | 3.4 | | 4.8 | 5.8 | 8 | 12.1 | 19.4 | 32.7 | 76.8 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 1 | N/A | | | | 0.01 | 0.02 | 0.02 | 0.04 | 0.07 | 0.1 | 0.13 |
| NO2 + NO3 as N | 60 | 0 | >10 | 0 | 0 | | 0.2 | 0.38 | 0.5 | 0.64 | 0.82 | 0.95 | 1.88 |
| TKN as N | 60 | 3 | N/A | | | | 0.2 | 0.3 | 0.5 | 0.67 | 0.8 | 1.19 | 2.2 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.08 | 0.1 | 0.12 | 0.15 | 0.17 | 0.2 | 0.36 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 8 | 1 | N/A | | | | 50 | 50 | 132 | 293 | 383 | 438 | 438 |
| Arsenic, total (As) | 8 | 7 | >10 | 0 | 0 | | 1 | 1 | 4 | 10 | 10 | 10 | 10 |
| Cadmium, total (Cd) | 8 | 8 | >2 | 0 | 0 | | 1 | 1 | 1.2 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 8 | 8 | >50 | 0 | 0 | | 5 | 5 | 10 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 8 | 8 | >7 | 0 | 0 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Iron, total (Fe) | 8 | 0 | >1000 | 0 | 0 | | 428 | 428 | 569 | 737 | 763 | 852 | 852 |
| Lead, total (Pb) | 8 | 8 | >25 | 0 | 0 | | 3 | 3 | 5 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 8 | 7 | >0.012 | 1 | 12.5 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 |
| Nickel, total (Ni) | 8 | 8 | >25 | 0 | 0 | | 5 | 5 | 6 | 10 | 10 | 10 | 10 |
| Zinc, total (Zn) | 8 | 6 | >50 | 0 | 0 | | 5 | 5 | 8 | 10 | 10 | 15 | 15 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 21.6 | 1 | 1.7 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: LIVINGSTON CRK AT WRIGHT CORPORATION WALKWAY NR ACME
Station #: B8441000 **Hydrologic Unit Code:** 03030005
Latitude: 34.33527 **Longitude:** -78.20111 **Stream class:** C Sw
Agency: LCFRP **NC stream index:** 18-64

Time period: 01/11/2006 to 12/02/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|--------|------------------------|------|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 59 | 0 | N/A | | | | 1.4 | 2.3 | 3.4 | 5 | 8 | 9.8 | 11.2 |
| pH (SU) | 59 | 0 | <4.3 | 0 | 0 | | 5.9 | 6.3 | 6.6 | 6.8 | 6.9 | 7.1 | 7.6 |
| | 59 | 0 | >9 | 0 | 0 | | 5.9 | 6.3 | 6.6 | 6.8 | 6.9 | 7.1 | 7.6 |
| Spec. conductance (umhos/cm at 25°C) | 58 | 7 | N/A | | | | 65 | 100 | 103 | 129 | 168 | 211 | 259 |
| Water Temperature (°C) | 59 | 0 | >32 | 0 | 0 | | 5.3 | 9.2 | 11.8 | 19 | 24.9 | 27.8 | 28.6 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 59 | 11 | N/A | | | | 1 | 2 | 2 | 3 | 4 | 6 | 29 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 59 | 0 | N/A | | | | 0.03 | 0.07 | 0.13 | 0.22 | 0.41 | 1.2 | 2.7 |
| NO2 + NO3 as N | 59 | 2 | N/A | | | | 0.02 | 0.06 | 0.11 | 0.22 | 0.55 | 0.89 | 3.64 |
| TKN as N | 59 | 0 | N/A | | | | 0.2 | 0.5 | 0.61 | 0.89 | 1.1 | 1.7 | 3.7 |
| Total Phosphorus | 59 | 6 | N/A | | | | 0.02 | 0.02 | 0.03 | 0.04 | 0.06 | 0.08 | 0.15 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 8 | 0 | N/A | | | | 140 | 140 | 218 | 318 | 608 | 975 | 975 |
| Arsenic, total (As) | 8 | 8 | >10 | 0 | 0 | | 1 | 1 | 4 | 10 | 10 | 10 | 10 |
| Cadmium, total (Cd) | 8 | 8 | >2 | 0 | 0 | | 1 | 1 | 1.2 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 8 | 8 | >50 | 0 | 0 | | 5 | 5 | 10 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 8 | 8 | >7 | 0 | 0 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Iron, total (Fe) | 8 | 0 | >1000 | 3 | 37.5 | | 188 | 188 | 375 | 820 | 1143 | 1163 | 1163 |
| Lead, total (Pb) | 8 | 8 | >25 | 0 | 0 | | 3 | 3 | 5 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 8 | 8 | >0.012 | 0 | 0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel, total (Ni) | 8 | 8 | >88 | 0 | 0 | | 5 | 5 | 6 | 10 | 10 | 10 | 10 |
| Zinc, total (Zn) | 8 | 6 | >50 | 0 | 0 | | 5 | 5 | 8 | 10 | 10 | 17 | 17 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 59 | 88.5 | 6 | 10.2 |

Key:

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Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: CAPE FEAR RIV AT NEILS EDDY LANDING NR ACME
Station #: B8450000 **Hydrologic Unit Code:** 03030005
Latitude: 34.35547 **Longitude:** -78.17942 **Stream class:** C Sw
Agency: LCFRP **NC stream index:** 18-(63)

Time period: 01/11/2006 to 12/09/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|---|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 278 | 0 | N/A | | | | 3.3 | 5.3 | 6 | 6.8 | 8.8 | 10.2 | 12.6 |
| pH (SU) | 278 | 0 | <4.3 | 0 | 0 | | 6.1 | 6.6 | 6.7 | 6.9 | 7 | 7.1 | 7.6 |
| | 278 | 0 | >9 | 0 | 0 | | 6.1 | 6.6 | 6.7 | 6.9 | 7 | 7.1 | 7.6 |
| Spec. conductance (umhos/cm at 25°C) | 278 | 12 | N/A | | | | 59 | 104 | 123 | 142 | 229 | 335 | 628 |
| Water Temperature (°C) | 278 | 0 | >32 | 0 | 0 | | 4.3 | 10.8 | 16.1 | 24.2 | 28.8 | 30 | 31.7 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 0 | N/A | | | | 2 | 5 | 6.2 | 9 | 19 | 28.6 | 77 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 0 | N/A | | | | 0.01 | 0.03 | 0.05 | 0.08 | 0.14 | 0.26 | 0.46 |
| NO2 + NO3 as N | 60 | 0 | N/A | | | | 0.18 | 0.36 | 0.47 | 0.59 | 0.8 | 1.02 | 2.25 |
| TKN as N | 60 | 0 | N/A | | | | 0.2 | 0.4 | 0.5 | 0.7 | 1 | 1.4 | 2.5 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.09 | 0.1 | 0.12 | 0.16 | 0.19 | 0.23 | 0.35 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 33.1 | 2 | 3.3 |

Key:

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 %Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
 Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: CAPE FEAR RIV AT INTAKE NR HOOPER HILL

Station #: B8465000

Hydrologic Unit Code: 03030005

Latitude: 34.33581

Longitude: -78.05436

Stream class: C Sw

Agency: LCFRP

NC stream index: 18-(63)

Time period: 01/11/2006 to 12/09/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|--------|------------------------|---|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 278 | 0 | N/A | | | | 2.3 | 3.9 | 4.6 | 5.8 | 8.2 | 10 | 12.6 |
| pH (SU) | 278 | 0 | <4.3 | 0 | 0 | | 6.2 | 6.6 | 6.7 | 6.8 | 6.9 | 7.1 | 7.3 |
| | 278 | 0 | >9 | 0 | 0 | | 6.2 | 6.6 | 6.7 | 6.8 | 6.9 | 7.1 | 7.3 |
| Spec. conductance (umhos/cm at 25°C) | 278 | 6 | N/A | | | | 68 | 110 | 138 | 175 | 230 | 311 | 570 |
| Water Temperature (°C) | 278 | 0 | >32 | 0 | 0 | | 4.4 | 11.1 | 16.2 | 24.3 | 28.4 | 30 | 31.8 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 2 | N/A | | | | 2 | 5.1 | 7 | 10 | 15.8 | 27.6 | 61 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 2 | N/A | | | | 0.01 | 0.03 | 0.05 | 0.07 | 0.1 | 0.14 | 0.19 |
| NO2 + NO3 as N | 60 | 0 | N/A | | | | 0.1 | 0.31 | 0.43 | 0.53 | 0.7 | 0.91 | 1.25 |
| TKN as N | 60 | 2 | N/A | | | | 0.2 | 0.4 | 0.6 | 0.7 | 1.02 | 1.44 | 2 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.07 | 0.09 | 0.11 | 0.14 | 0.17 | 0.2 | 0.25 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 7 | 0 | N/A | | | | 58 | 58 | 201 | 390 | 496 | 601 | 601 |
| Arsenic, total (As) | 7 | 7 | >10 | 0 | 0 | | 1 | 1 | 2 | 10 | 10 | 10 | 10 |
| Cadmium, total (Cd) | 7 | 7 | >2 | 0 | 0 | | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 7 | 7 | >50 | 0 | 0 | | 5 | 5 | 5 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 7 | 7 | >7 | 0 | 0 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Iron, total (Fe) | 7 | 0 | >1000 | 0 | 0 | | 549 | 549 | 623 | 694 | 927 | 980 | 980 |
| Lead, total (Pb) | 7 | 7 | >25 | 0 | 0 | | 3 | 3 | 3 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 7 | 7 | >0.012 | 0 | 0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel, total (Ni) | 7 | 7 | >88 | 0 | 0 | | 5 | 5 | 5 | 10 | 10 | 10 | 10 |
| Zinc, total (Zn) | 7 | 4 | >50 | 0 | 0 | | 9 | 9 | 10 | 10 | 10 | 13 | 13 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: | %Conf: |
|------------|---------|----------|----------|--------|
| 60 | 31 | 0 | 0 | |

Key:

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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: SOUTH RIV AT US 13 NR COOPER
Station #: B8470000
Latitude: 35.15600 **Longitude:** -78.64013
Agency: LCFRP

Hydrologic Unit Code: 03030006
Stream class: C Sw
NC stream index: 18-68-12-(0.5)

Time period: 01/18/2006 to 12/01/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|---|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 60 | 0 | N/A | | | | 0.2 | 0.8 | 1.6 | 4.2 | 7.1 | 10.2 | 14.9 |
| pH (SU) | 60 | 0 | <4.3 | 0 | 0 | | 5.3 | 5.9 | 6 | 6.1 | 6.3 | 6.4 | 6.9 |
| | 60 | 0 | >9 | 0 | 0 | | 5.3 | 5.9 | 6 | 6.1 | 6.3 | 6.4 | 6.9 |
| Spec. conductance (umhos/cm at 25°C) | 60 | 11 | N/A | | | | 58 | 68 | 78 | 98 | 113 | 172 | 417 |
| Water Temperature (°C) | 60 | 0 | >32 | 0 | 0 | | 0.3 | 6.7 | 9.5 | 18.7 | 22.9 | 25.1 | 27.9 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 11 | N/A | | | | 1 | 2 | 2 | 4 | 10 | 17 | 25 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 3 | N/A | | | | 0.01 | 0.01 | 0.01 | 0.03 | 0.05 | 0.12 | 0.5 |
| NO2 + NO3 as N | 60 | 17 | N/A | | | | 0.02 | 0.02 | 0.03 | 0.04 | 0.09 | 0.21 | 0.48 |
| TKN as N | 60 | 2 | N/A | | | | 0.2 | 0.31 | 0.6 | 0.85 | 1.19 | 1.68 | 2 |
| Total Phosphorus | 60 | 6 | N/A | | | | 0.02 | 0.02 | 0.04 | 0.07 | 0.11 | 0.19 | 0.27 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 126.4 | 9 | 15 |

Key:

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 Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: GREAT COHARIE CRK AT SR 1214 NR BUTLER CROSSROADS
Station #: B8604000 **Hydrologic Unit Code:** 03030006
Latitude: 34.91824 **Longitude:** -78.38918 **Stream class:** C Sw
Agency: LCFRP **NC stream index:** 18-68-1

Time period: 01/18/2006 to 12/01/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|--------|------------------------|----|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 60 | 0 | N/A | | | | 1.8 | 3.9 | 5 | 6 | 8.3 | 10.6 | 16.8 |
| pH (SU) | 60 | 0 | <4.3 | 0 | 0 | | 5.7 | 6.1 | 6.3 | 6.5 | 6.7 | 7 | 7.2 |
| | 60 | 0 | >9 | 0 | 0 | | 5.7 | 6.1 | 6.3 | 6.5 | 6.7 | 7 | 7.2 |
| Spec. conductance (umhos/cm at 25°C) | 60 | 2 | N/A | | | | 76 | 95 | 108 | 150 | 184 | 331 | 489 |
| Water Temperature (°C) | 60 | 0 | >32 | 0 | 0 | | 0.1 | 6.7 | 10.5 | 18.4 | 23.6 | 26 | 28.3 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 20 | N/A | | | | 1 | 2 | 2 | 3 | 4 | 8.9 | 40 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 3 | N/A | | | | 0.01 | 0.01 | 0.02 | 0.04 | 0.06 | 0.09 | 0.21 |
| NO2 + NO3 as N | 60 | 5 | N/A | | | | 0.02 | 0.03 | 0.04 | 0.1 | 0.36 | 0.73 | 1.95 |
| TKN as N | 60 | 2 | N/A | | | | 0.2 | 0.41 | 0.6 | 0.8 | 1 | 1.39 | 9.43 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.03 | 0.06 | 0.12 | 0.22 | 0.4 | 0.66 | 1.72 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 8 | 1 | N/A | | | | 37 | 37 | 58 | 95 | 117 | 353 | 353 |
| Arsenic, total (As) | 8 | 8 | >10 | 0 | 0 | | 1 | 1 | 4 | 10 | 10 | 10 | 10 |
| Cadmium, total (Cd) | 8 | 8 | >2 | 0 | 0 | | 1 | 1 | 1.2 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 8 | 8 | >50 | 0 | 0 | | 5 | 5 | 10 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 8 | 8 | >7 | 0 | 0 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Iron, total (Fe) | 8 | 0 | >1000 | 2 | 25 | | 131 | 131 | 244 | 530 | 1442 | 2520 | 2520 |
| Lead, total (Pb) | 8 | 8 | >25 | 0 | 0 | | 3 | 3 | 5 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 8 | 8 | >0.012 | 0 | 0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel, total (Ni) | 8 | 7 | >88 | 0 | 0 | | 5 | 5 | 5 | 10 | 10 | 10 | 10 |
| Zinc, total (Zn) | 8 | 7 | >50 | 0 | 0 | | 5 | 5 | 9 | 10 | 10 | 10 | 10 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: | %Conf: |
|------------|---------|----------|----------|--------|
| 60 | 60.4 | 3 | 5 | |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: LITTLE COHARIE CRK AT SR 1207 NR INGOLD

Station #: B8610001

Hydrologic Unit Code: 03030006

Latitude: 34.83473

Longitude: -78.37087

Stream class: C Sw

Agency: LCFRP

NC stream index: 18-68-1-17

Time period: 01/18/2006 to 12/01/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|---|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 60 | 0 | N/A | | | | 3.7 | 5.7 | 6.6 | 7.5 | 9.8 | 11.7 | 14.1 |
| pH (SU) | 60 | 0 | <4.3 | 0 | 0 | | 4.8 | 5.6 | 6.1 | 6.4 | 6.7 | 6.8 | 7.1 |
| | 60 | 0 | >9 | 0 | 0 | | 4.8 | 5.6 | 6.1 | 6.4 | 6.7 | 6.8 | 7.1 |
| Spec. conductance (umhos/cm at 25°C) | 60 | 12 | N/A | | | | 61 | 73 | 84 | 94 | 100 | 126 | 171 |
| Water Temperature (°C) | 60 | 0 | >32 | 0 | 0 | | 1 | 6.5 | 10.2 | 18.2 | 23.1 | 25.4 | 27.3 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 21 | N/A | | | | 1 | 2 | 2 | 3 | 3 | 4.9 | 22 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 4 | N/A | | | | 0.01 | 0.01 | 0.02 | 0.03 | 0.04 | 0.06 | 0.21 |
| NO2 + NO3 as N | 60 | 1 | N/A | | | | 0.02 | 0.07 | 0.15 | 0.36 | 0.5 | 0.88 | 1.75 |
| TKN as N | 60 | 0 | N/A | | | | 0.2 | 0.4 | 0.53 | 0.7 | 0.96 | 1.25 | 1.8 |
| Total Phosphorus | 60 | 3 | N/A | | | | 0.02 | 0.02 | 0.03 | 0.06 | 0.08 | 0.13 | 0.35 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 60.6 | 3 | 5 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: SIX RUNS CRK AT SR 1003 NR INGOLD
Station #: B8740000
Latitude: 34.79327 **Longitude:** -78.31125
Agency: LCFRP

Hydrologic Unit Code: 03030006
Stream class: C Sw ORW+
NC stream index: 18-68-2-(11.5)

Time period: 01/18/2006 to 12/01/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|--------|------------------------|----|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 59 | 0 | N/A | | | | 3.5 | 5.8 | 6.6 | 8.1 | 10.1 | 11.6 | 13.5 |
| pH (SU) | 59 | 0 | <4.3 | 0 | 0 | | 5.7 | 6 | 6.4 | 6.6 | 7 | 7.2 | 7.6 |
| | 59 | 0 | >9 | 0 | 0 | | 5.7 | 6 | 6.4 | 6.6 | 7 | 7.2 | 7.6 |
| Spec. conductance (umhos/cm at 25°C) | 59 | 2 | N/A | | | | 26 | 100 | 112 | 127 | 138 | 158 | 169 |
| Water Temperature (°C) | 59 | 0 | >32 | 0 | 0 | | 1.6 | 6.9 | 10.3 | 18 | 23.2 | 25.3 | 27.4 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 59 | 12 | N/A | | | | 2 | 2 | 2 | 3 | 5 | 8 | 30 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 59 | 2 | N/A | | | | 0.01 | 0.01 | 0.02 | 0.04 | 0.07 | 0.12 | 0.7 |
| NO2 + NO3 as N | 59 | 0 | N/A | | | | 0.06 | 0.15 | 0.34 | 0.67 | 0.93 | 1.12 | 2.39 |
| TKN as N | 59 | 0 | N/A | | | | 0.1 | 0.33 | 0.5 | 0.7 | 1 | 1.1 | 2.1 |
| Total Phosphorus | 59 | 0 | N/A | | | | 0.03 | 0.05 | 0.07 | 0.11 | 0.14 | 0.17 | 0.21 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 8 | 1 | N/A | | | | 50 | 50 | 126 | 271 | 300 | 374 | 374 |
| Arsenic, total (As) | 8 | 8 | >10 | 0 | 0 | | 1 | 1 | 4 | 10 | 10 | 10 | 10 |
| Cadmium, total (Cd) | 8 | 8 | >2 | 0 | 0 | | 1 | 1 | 1.2 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 8 | 8 | >50 | 0 | 0 | | 5 | 5 | 10 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 8 | 8 | >7 | 0 | 0 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Iron, total (Fe) | 8 | 0 | >1000 | 4 | 50 | | 282 | 282 | 552 | 958 | 1748 | 3480 | 3480 |
| Lead, total (Pb) | 8 | 8 | >25 | 0 | 0 | | 3 | 3 | 5 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 8 | 8 | >0.012 | 0 | 0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel, total (Ni) | 8 | 8 | >88 | 0 | 0 | | 5 | 5 | 6 | 10 | 10 | 10 | 10 |
| Zinc, total (Zn) | 8 | 5 | >50 | 0 | 0 | | 6 | 6 | 8 | 10 | 10 | 14 | 14 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 59 | 130.6 | 10 | 16.9 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: COLLY CRK AT NC 53 AT COLLY

Station #: B8981000

Hydrologic Unit Code: 03030006

Latitude: 34.46411

Longitude: -78.25692

Stream class: C Sw

Agency: LCFRP

NC stream index: 18-68-17

Time period: 01/11/2006 to 12/02/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|--------|------------------------|------|--------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 56 | 0 | N/A | | | | 3.7 | 4.5 | 5.2 | 6.6 | 7.9 | 9.7 | 11.1 |
| pH (SU) | 56 | 12 | <4.3 | 47 | 83.9 | > 99.9 | 3.7 | 3.9 | 4 | 4 | 4.1 | 4.4 | 6.2 |
| | 56 | 12 | >9 | 0 | 0 | | 3.7 | 3.9 | 4 | 4 | 4.1 | 4.4 | 6.2 |
| Spec. conductance (umhos/cm at 25°C) | 55 | 14 | N/A | | | | 50 | 57 | 73 | 82 | 100 | 105 | 207 |
| Water Temperature (°C) | 56 | 0 | >32 | 0 | 0 | | 4 | 6.5 | 11.2 | 15.7 | 22.8 | 26.5 | 30.2 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 56 | 31 | N/A | | | | 1 | 1.7 | 2 | 2 | 3 | 5 | 15 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 56 | 7 | N/A | | | | 0.01 | 0.01 | 0.01 | 0.03 | 0.07 | 0.15 | 0.44 |
| NO2 + NO3 as N | 56 | 27 | N/A | | | | 0.02 | 0.02 | 0.02 | 0.02 | 0.04 | 0.37 | 0.82 |
| TKN as N | 56 | 0 | N/A | | | | 0.2 | 0.57 | 0.7 | 0.94 | 1.2 | 1.62 | 2.2 |
| Total Phosphorus | 56 | 16 | N/A | | | | 0.02 | 0.02 | 0.02 | 0.03 | 0.06 | 0.1 | 0.39 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 8 | 0 | N/A | | | | 69 | 69 | 564 | 762 | 1020 | 1120 | 1120 |
| Arsenic, total (As) | 8 | 8 | >10 | 0 | 0 | | 1 | 1 | 4 | 10 | 10 | 10 | 10 |
| Cadmium, total (Cd) | 8 | 8 | >2 | 0 | 0 | | 1 | 1 | 1.2 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 8 | 7 | >50 | 0 | 0 | | 5 | 5 | 12 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 8 | 8 | >7 | 0 | 0 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Iron, total (Fe) | 8 | 0 | >1000 | 2 | 25 | | 338 | 338 | 466 | 949 | 1132 | 1652 | 1652 |
| Lead, total (Pb) | 8 | 8 | >25 | 0 | 0 | | 3 | 3 | 5 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 8 | 8 | >0.012 | 0 | 0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel, total (Ni) | 8 | 7 | >88 | 0 | 0 | | 5 | 5 | 6 | 10 | 10 | 10 | 10 |
| Zinc, total (Zn) | 8 | 5 | >50 | 0 | 0 | | 8 | 8 | 9 | 10 | 10 | 14 | 14 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 56 | 52.6 | 1 | 1.8 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: BLACK RIV AT NC 210 AT STILL BLUFF

Station #: B9000000

Hydrologic Unit Code: 03030006

Latitude: 34.43124

Longitude: -78.14411

Stream class: C Sw ORW+

Agency: LCFRP

NC stream index: 18-68

Time period: 01/11/2006 to 12/02/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|---|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 59 | 0 | N/A | | | | 3.5 | 4.6 | 4.9 | 6.6 | 8.6 | 10.5 | 11.5 |
| pH (SU) | 60 | 0 | <4.3 | 0 | 0 | | 4.8 | 5.6 | 5.9 | 6.2 | 6.4 | 6.7 | 7.8 |
| | 60 | 0 | >9 | 0 | 0 | | 4.8 | 5.6 | 5.9 | 6.2 | 6.4 | 6.7 | 7.8 |
| Spec. conductance (umhos/cm at 25°C) | 59 | 11 | N/A | | | | 66 | 77 | 83 | 100 | 111 | 152 | 186 |
| Water Temperature (°C) | 60 | 0 | >32 | 0 | 0 | | 5.4 | 8.1 | 11.6 | 19 | 25.8 | 29.2 | 31.1 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 30 | N/A | | | | 1 | 2 | 2 | 2 | 3 | 4 | 8 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 9 | N/A | | | | 0.01 | 0.01 | 0.01 | 0.02 | 0.04 | 0.05 | 0.16 |
| NO2 + NO3 as N | 60 | 4 | N/A | | | | 0.02 | 0.04 | 0.11 | 0.18 | 0.26 | 0.45 | 0.98 |
| TKN as N | 60 | 0 | N/A | | | | 0.2 | 0.4 | 0.6 | 0.7 | 0.92 | 1.2 | 1.91 |
| Total Phosphorus | 60 | 2 | N/A | | | | 0.02 | 0.03 | 0.04 | 0.08 | 0.11 | 0.13 | 0.16 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 64.3 | 2 | 3.3 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: CAPE FEAR RIV UPS INDIAN CREEK NR PHOENIX

Station #: B9030000

Hydrologic Unit Code: 03030005

Latitude: 34.30278

Longitude: -78.01406

Stream class: C Sw

Agency: LCFRP

NC stream index: 18-(63)

Time period: 01/11/2006 to 12/09/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|---|--------------|---------|------|------------------------|---|-------|-------------|------|------|------|------|------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 279 | 0 | N/A | | | | 2.9 | 3.8 | 4.3 | 5.2 | 7.6 | 9.8 | 12 |
| pH (SU) | 279 | 0 | <4.3 | 0 | 0 | | 5.9 | 6.5 | 6.6 | 6.8 | 6.9 | 7 | 7.4 |
| | 279 | 0 | >9 | 0 | 0 | | 5.9 | 6.5 | 6.6 | 6.8 | 6.9 | 7 | 7.4 |
| Spec. conductance (umhos/cm at 25°C) | 279 | 18 | N/A | | | | 83 | 100 | 128 | 168 | 234 | 431 | 19467 |
| Water Temperature (°C) | 279 | 0 | >32 | 0 | 0 | | 3.4 | 11.2 | 16.1 | 24.2 | 28.4 | 29.8 | 31.7 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 0 | N/A | | | | 3 | 5 | 6.2 | 10 | 13 | 19.8 | 43 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 0 | N/A | | | | 0.01 | 0.02 | 0.04 | 0.05 | 0.08 | 0.12 | 0.17 |
| NO2 + NO3 as N | 60 | 0 | N/A | | | | 0.09 | 0.3 | 0.41 | 0.51 | 0.65 | 0.8 | 1.73 |
| TKN as N | 60 | 1 | N/A | | | | 0.2 | 0.4 | 0.6 | 0.8 | 0.97 | 1.29 | 2 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.06 | 0.08 | 0.1 | 0.12 | 0.15 | 0.18 | 0.46 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 31.7 | 1 | 1.7 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: CAPE FEAR RIV DNS RR BRIDGE AT NAVASSA

Station #: B9050025

Hydrologic Unit Code: 03030005

Latitude: 34.25943

Longitude: -77.98767

Stream class: SC

Agency: LCFRP

NC stream index: 18-(71)

Time period: 01/10/2006 to 12/15/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--|----------------|--------------------|--------------------|------------------------|------|--------|-------------|------|------|------|------|-------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 279 | 0 | <5 | 130 | 46.6 | > 99.9 | 2.8 | 3.7 | 4.1 | 5.3 | 7.5 | 9.8 | 12.4 |
| pH (SU) | 279 | 0 | <6.8 | 77 | 27.6 | > 99.9 | 6 | 6.5 | 6.7 | 6.9 | 7.1 | 7.3 | 7.9 |
| | 279 | 0 | >8.5 | 0 | 0 | | 6 | 6.5 | 6.7 | 6.9 | 7.1 | 7.3 | 7.9 |
| Spec. conductance (umhos/cm at 25°C) | 279 | 18 | N/A | | | | 90 | 103 | 140 | 1552 | 8965 | 16912 | 45700 |
| Water Temperature (°C) | 279 | 0 | >32 | 0 | 0 | | 3.2 | 10.1 | 16.2 | 24.4 | 28.4 | 29.9 | 31.7 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 0 | N/A | | | | 5 | 7 | 9 | 13.5 | 22 | 40.9 | 59 |
| Turbidity (NTU) | 60 | 0 | >25 | 8 | 13.3 | 85.8 | 4.4 | 7.6 | 9 | 11.8 | 17.6 | 37.3 | 74.1 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 59 | 2 | N/A | | | | 0.01 | 0.02 | 0.04 | 0.06 | 0.09 | 0.11 | 0.15 |
| NO2 + NO3 as N | 60 | 0 | N/A | | | | 0.09 | 0.29 | 0.37 | 0.46 | 0.62 | 0.74 | 0.98 |
| TKN as N | 60 | 0 | N/A | | | | 0.1 | 0.4 | 0.53 | 0.7 | 0.9 | 1.3 | 2.1 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.05 | 0.08 | 0.09 | 0.12 | 0.17 | 0.2 | 0.27 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 8 | 0 | N/A | | | | 287 | 287 | 310 | 397 | 551 | 674 | 674 |
| Arsenic, total (As) | 8 | 8 | >10 | 0 | 0 | | 1 | 1 | 4 | 10 | 10 | 10 | 10 |
| Cadmium, total (Cd) | 8 | 8 | >5 | 0 | 0 | | 1 | 1 | 1.2 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 8 | 8 | >20 | 0 | 0 | | 5 | 5 | 10 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 8 | 8 | >3 | 0 | 0 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Iron, total (Fe) | 8 | 0 | N/A | | | | 546 | 546 | 593 | 780 | 908 | 971 | 971 |
| Lead, total (Pb) | 8 | 8 | >25 | 0 | 0 | | 3 | 3 | 5 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 8 | 8 | >0.025 | 0 | 0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel, total (Ni) | 8 | 8 | >8.3 | 0 | 0 | | 5 | 5 | 6 | 10 | 10 | 10 | 10 |
| Zinc, total (Zn) | 8 | 5 | >86 | 0 | 0 | | 7 | 7 | 8 | 10 | 10 | 22 | 22 |
| Fecal Coliform Screening(#/100mL) | | | | | | | | | | | | | |
| # results: | Geomean | # > 400: | % > 400: | %Conf: | | | | | | | | | |
| 60 | 38.7 | 3 | 5 | | | | | | | | | | |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: CAPE FEAR RIV AT HORSESHOE BEND NR WILMINGTON
Station #: B9050100 **Hydrologic Unit Code:** 03030005
Latitude: 34.24372 **Longitude:** -77.96980 **Stream class:** SC
Agency: LCFRP **NC stream index:** 18-(71)

Time period: 01/10/2006 to 12/15/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|------|--------|-------------|------|------|------|-------|-------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 279 | 0 | <5 | 128 | 45.9 | > 99.9 | 2.4 | 3.7 | 4.2 | 5.2 | 7.5 | 9.4 | 12.1 |
| pH (SU) | 279 | 0 | <6.8 | 56 | 20.1 | > 99.9 | 5.9 | 6.5 | 6.8 | 7 | 7.2 | 7.4 | 8 |
| | 279 | 0 | >8.5 | 0 | 0 | | 5.9 | 6.5 | 6.8 | 7 | 7.2 | 7.4 | 8 |
| Spec. conductance (umhos/cm at 25°C) | 279 | 15 | N/A | | | | 91 | 107 | 328 | 7252 | 15173 | 25470 | 38620 |
| Water Temperature (°C) | 279 | 0 | >32 | 1 | 0.4 | | 3.3 | 10.6 | 16.7 | 24.9 | 28.5 | 30 | 32.4 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 0 | N/A | | | | 6 | 7 | 9 | 11 | 16 | 27.7 | 44 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 3 | N/A | | | | 0.01 | 0.01 | 0.03 | 0.06 | 0.09 | 0.12 | 0.18 |
| NO2 + NO3 as N | 60 | 0 | N/A | | | | 0.06 | 0.19 | 0.34 | 0.43 | 0.59 | 0.7 | 0.9 |
| TKN as N | 60 | 2 | N/A | | | | 0.1 | 0.4 | 0.5 | 0.7 | 0.81 | 1.18 | 1.5 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.06 | 0.07 | 0.08 | 0.11 | 0.14 | 0.17 | 0.24 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 40.5 | 0 | 0 |

Key:

result: number of observations
 # ND: number of observations reported to be below detection level (non-detect)
 EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
 Results not meeting EL: number and percentages of observations not meeting evaluation level
 %Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
 Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: NORTHEAST CAPE FEAR RIV AT NC 403 NR WILLIAMS

Station #: B9090000

Hydrologic Unit Code: 03030007

Latitude: 35.17839

Longitude: -77.98072

Stream class: C Sw

Agency: LCFRP

NC stream index: 18-74-(1)

Time period: 01/19/2006 to 12/13/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|---|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 60 | 0 | N/A | | | | 0.4 | 0.8 | 1.8 | 5 | 7.3 | 9.1 | 11.9 |
| pH (SU) | 60 | 0 | <4.3 | 0 | 0 | | 6 | 6.3 | 6.4 | 6.5 | 6.7 | 6.9 | 7.3 |
| | 60 | 0 | >9 | 0 | 0 | | 6 | 6.3 | 6.4 | 6.5 | 6.7 | 6.9 | 7.3 |
| Spec. conductance (umhos/cm at 25°C) | 60 | 0 | N/A | | | | 132 | 204 | 275 | 373 | 652 | 1030 | 1330 |
| Water Temperature (°C) | 60 | 0 | >32 | 0 | 0 | | 3.1 | 7.1 | 12.5 | 17.9 | 24.2 | 26.9 | 30.5 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 12 | N/A | | | | 1 | 1.1 | 2 | 3.5 | 5.8 | 9 | 14 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 1 | N/A | | | | 0.01 | 0.01 | 0.03 | 0.06 | 0.11 | 0.16 | 0.34 |
| NO2 + NO3 as N | 60 | 10 | N/A | | | | 0.02 | 0.02 | 0.04 | 0.34 | 0.87 | 1.72 | 3.52 |
| TKN as N | 60 | 0 | N/A | | | | 0.2 | 0.4 | 0.63 | 0.8 | 1.08 | 1.5 | 2.2 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.04 | 0.06 | 0.08 | 0.16 | 0.33 | 0.54 | 0.76 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 110.6 | 9 | 15 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: PANTHER CRK NR FAISON
Station #: B9130000
Latitude: 35.13445 **Longitude:** -78.13630
Agency: LCFRP

Hydrologic Unit Code: 03030007
Stream class: C Sw
NC stream index: 18-74-19-3

Time period: 01/19/2006 to 12/13/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|-----|-------|-------------|------|------|------|------|-------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 59 | 0 | N/A | | | | 1.2 | 5.2 | 6.5 | 7.8 | 9.2 | 10.2 | 10.8 |
| pH (SU) | 59 | 0 | <4.3 | 0 | 0 | | 6.3 | 6.5 | 6.6 | 6.7 | 7 | 7.3 | 8 |
| | 59 | 0 | >9 | 0 | 0 | | 6.3 | 6.5 | 6.6 | 6.7 | 7 | 7.3 | 8 |
| Spec. conductance (umhos/cm at 25°C) | 59 | 0 | N/A | | | | 328 | 450 | 930 | 1834 | 4989 | 10549 | 13906 |
| Water Temperature (°C) | 59 | 0 | >32 | 1 | 1.7 | | 3.7 | 6.5 | 12.8 | 19 | 24.8 | 27.9 | 32.4 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 59 | 1 | N/A | | | | 2 | 3 | 4 | 7 | 10 | 27 | 73 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 59 | 2 | N/A | | | | 0.01 | 0.02 | 0.04 | 0.1 | 0.19 | 0.44 | 1.71 |
| NO2 + NO3 as N | 59 | 12 | N/A | | | | 0.02 | 0.02 | 0.04 | 0.23 | 0.81 | 1.85 | 3.46 |
| TKN as N | 59 | 0 | N/A | | | | 0.4 | 0.6 | 0.7 | 1.03 | 1.3 | 2.1 | 4.9 |
| Total Phosphorus | 59 | 0 | N/A | | | | 0.06 | 0.08 | 0.13 | 0.18 | 0.27 | 0.58 | 2.95 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: | %Conf: |
|------------|---------|----------|----------|--------|
| 59 | 305.6 | 26 | 44.1 | 100 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: GOSHEN SWAMP AT NC 11 AND NC 903 NR KORNEGAY

Station #: B9191000

Hydrologic Unit Code: 03030007

Latitude: 35.02808

Longitude: -77.85160

Stream class: C Sw

Agency: LCFRP

NC stream index: 18-74-19

Time period: 01/19/2006 to 12/13/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|---|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 60 | 0 | N/A | | | | 0.3 | 0.7 | 2 | 4.6 | 8.3 | 10.1 | 13.7 |
| pH (SU) | 60 | 0 | <4.3 | 0 | 0 | | 5.2 | 6.3 | 6.4 | 6.6 | 6.8 | 6.9 | 7.3 |
| | 60 | 0 | >9 | 0 | 0 | | 5.2 | 6.3 | 6.4 | 6.6 | 6.8 | 6.9 | 7.3 |
| Spec. conductance (umhos/cm at 25°C) | 60 | 0 | N/A | | | | 119 | 132 | 162 | 196 | 230 | 319 | 622 |
| Water Temperature (°C) | 60 | 0 | >32 | 0 | 0 | | 2.8 | 7.2 | 11.6 | 17.2 | 24.4 | 26.2 | 29.6 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 14 | N/A | | | | 1 | 2 | 2 | 3 | 10 | 17.8 | 28 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 5 | N/A | | | | 0.01 | 0.01 | 0.02 | 0.03 | 0.08 | 0.19 | 0.52 |
| NO2 + NO3 as N | 60 | 26 | N/A | | | | 0.02 | 0.02 | 0.02 | 0.03 | 0.11 | 0.66 | 2.02 |
| TKN as N | 60 | 0 | N/A | | | | 0.1 | 0.31 | 0.57 | 0.9 | 1.37 | 1.79 | 2.3 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.03 | 0.04 | 0.06 | 0.11 | 0.28 | 0.49 | 1.06 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 118.4 | 10 | 16.7 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: NORTHEAST CAPE FEAR RIV AT SR 1700 NR SARECTA

Station #: B9191500

Hydrologic Unit Code: 03030007

Latitude: 34.98008

Longitude: -77.86221

Stream class: C Sw

Agency: LCFRP

NC stream index: 18-74-1

Time period: 01/19/2006 to 12/13/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|--------|------------------------|------|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 60 | 0 | N/A | | | | 3.6 | 5 | 5.7 | 6.6 | 8.8 | 9.8 | 13 |
| pH (SU) | 60 | 0 | <4.3 | 0 | 0 | | 5.8 | 6.3 | 6.5 | 6.7 | 7 | 7.1 | 7.4 |
| | 60 | 0 | >9 | 0 | 0 | | 5.8 | 6.3 | 6.5 | 6.7 | 7 | 7.1 | 7.4 |
| Spec. conductance (umhos/cm at 25°C) | 60 | 0 | N/A | | | | 100 | 131 | 156 | 188 | 231 | 339 | 525 |
| Water Temperature (°C) | 60 | 0 | >32 | 0 | 0 | | 1.8 | 6.3 | 13 | 17.1 | 24 | 26.8 | 30.2 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 14 | N/A | | | | 1 | 2 | 2 | 3 | 6 | 9.9 | 16 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 3 | N/A | | | | 0.01 | 0.01 | 0.03 | 0.05 | 0.09 | 0.17 | 0.62 |
| NO2 + NO3 as N | 60 | 0 | N/A | | | | 0.03 | 0.06 | 0.12 | 0.25 | 0.51 | 1.09 | 2.55 |
| TKN as N | 60 | 0 | N/A | | | | 0.2 | 0.6 | 0.7 | 1 | 1.2 | 1.58 | 2.2 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.03 | 0.05 | 0.09 | 0.12 | 0.17 | 0.27 | 0.88 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 8 | 1 | N/A | | | | 22 | 22 | 66 | 138 | 316 | 397 | 397 |
| Arsenic, total (As) | 8 | 7 | >10 | 1 | 12.5 | | 1 | 1 | 4 | 10 | 10 | 22 | 22 |
| Cadmium, total (Cd) | 8 | 8 | >2 | 0 | 0 | | 1 | 1 | 1.2 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 8 | 8 | >50 | 0 | 0 | | 5 | 5 | 10 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 8 | 8 | >7 | 0 | 0 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Iron, total (Fe) | 8 | 0 | >1000 | 4 | 50 | | 235 | 235 | 446 | 1115 | 1440 | 1490 | 1490 |
| Lead, total (Pb) | 8 | 8 | >25 | 0 | 0 | | 3 | 3 | 5 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 8 | 8 | >0.012 | 0 | 0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel, total (Ni) | 8 | 8 | >88 | 0 | 0 | | 5 | 5 | 6 | 10 | 10 | 10 | 10 |
| Zinc, total (Zn) | 8 | 7 | >50 | 0 | 0 | | 5 | 5 | 6 | 10 | 10 | 13 | 13 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: | %Conf: |
|------------|---------|----------|----------|--------|
| 60 | 183.8 | 13 | 21.7 | 69.4 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: ROCKFISH CRK AT US 117 NR WALLACE

Station #: B9430000

Hydrologic Unit Code: 03030007

Latitude: 34.71684

Longitude: -77.97949

Stream class: C Sw

Agency: LCFRP

NC stream index: 18-74-29

Time period: 01/19/2006 to 12/13/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|---|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 60 | 0 | N/A | | | | 3.3 | 5 | 6.2 | 7.8 | 9.5 | 11 | 12.9 |
| pH (SU) | 60 | 0 | <4.3 | 0 | 0 | | 6 | 6.5 | 6.8 | 7 | 7.1 | 7.3 | 8.2 |
| | 60 | 0 | >9 | 0 | 0 | | 6 | 6.5 | 6.8 | 7 | 7.1 | 7.3 | 8.2 |
| Spec. conductance (umhos/cm at 25°C) | 60 | 4 | N/A | | | | 71 | 100 | 116 | 138 | 168 | 238 | 635 |
| Water Temperature (°C) | 60 | 0 | >32 | 0 | 0 | | 2.4 | 6.5 | 12.3 | 17.1 | 23.2 | 26.4 | 29.5 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 9 | N/A | | | | 1 | 2 | 2.8 | 4 | 8 | 13 | 37 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 0 | N/A | | | | 0.01 | 0.02 | 0.03 | 0.04 | 0.07 | 0.11 | 0.38 |
| NO2 + NO3 as N | 60 | 1 | N/A | | | | 0.02 | 0.17 | 0.34 | 0.76 | 1.4 | 1.87 | 3.74 |
| TKN as N | 60 | 0 | N/A | | | | 0.3 | 0.6 | 0.8 | 1 | 1.2 | 1.39 | 2 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.06 | 0.09 | 0.14 | 0.25 | 0.4 | 0.65 | 0.9 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 136.2 | 9 | 15 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: LITTLE ROCKFISH CRK AT NC 11 NR WALLACE

Station #: B9460000

Hydrologic Unit Code: 03030007

Latitude: 34.72244

Longitude: -77.98141

Stream class: C Sw

Agency: LCFRP

NC stream index: 18-74-29-6

Time period: 01/19/2006 to 12/13/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--|----------------|--------------------|--------------------|------------------------|------|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 58 | 0 | N/A | | | | 5.3 | 7.4 | 8.1 | 9.4 | 11 | 11.7 | 13 |
| pH (SU) | 58 | 0 | <4.3 | 0 | 0 | | 6 | 6.7 | 6.9 | 7.2 | 7.4 | 7.7 | 8.2 |
| | 58 | 0 | >9 | 0 | 0 | | 6 | 6.7 | 6.9 | 7.2 | 7.4 | 7.7 | 8.2 |
| Spec. conductance (umhos/cm at 25°C) | 58 | 2 | N/A | | | | 52 | 100 | 121 | 146 | 172 | 233 | 291 |
| Water Temperature (°C) | 58 | 0 | >32 | 0 | 0 | | 3.5 | 6 | 11.4 | 17.1 | 23.1 | 26.8 | 29.4 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 58 | 9 | N/A | | | | 1 | 2 | 2 | 3.5 | 9.2 | 16.8 | 101 |
| Turbidity (NTU) | 58 | 1 | >50 | 0 | 0 | | 1 | 2.8 | 3.4 | 4.6 | 8.1 | 12.7 | 47 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 58 | 2 | N/A | | | | 0.01 | 0.01 | 0.03 | 0.07 | 0.1 | 0.18 | 0.48 |
| NO2 + NO3 as N | 58 | 9 | N/A | | | | 0.02 | 0.02 | 0.06 | 0.16 | 0.3 | 1.05 | 10.7 |
| TKN as N | 58 | 0 | N/A | | | | 0.3 | 0.4 | 0.6 | 0.8 | 0.95 | 1.2 | 2 |
| Total Phosphorus | 58 | 0 | N/A | | | | 0.02 | 0.04 | 0.04 | 0.07 | 0.09 | 0.1 | 0.3 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 8 | 1 | N/A | | | | 5 | 5 | 145 | 242 | 496 | 745 | 745 |
| Arsenic, total (As) | 8 | 8 | >10 | 0 | 0 | | 1 | 1 | 4 | 10 | 10 | 10 | 10 |
| Cadmium, total (Cd) | 8 | 8 | >2 | 0 | 0 | | 1 | 1 | 1.2 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 8 | 8 | >50 | 0 | 0 | | 5 | 5 | 10 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 8 | 8 | >7 | 0 | 0 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Iron, total (Fe) | 8 | 0 | >1000 | 5 | 62.5 | | 427 | 427 | 612 | 1199 | 2120 | 3160 | 3160 |
| Lead, total (Pb) | 8 | 8 | >25 | 0 | 0 | | 3 | 3 | 5 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 8 | 8 | >0.012 | 0 | 0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel, total (Ni) | 8 | 8 | >88 | 0 | 0 | | 5 | 5 | 6 | 10 | 10 | 10 | 10 |
| Zinc, total (Zn) | 8 | 5 | >50 | 0 | 0 | | 5 | 5 | 8 | 10 | 10 | 14 | 14 |
| Fecal Coliform Screening(#/100mL) | | | | | | | | | | | | | |
| # results: | Geomean | # > 400: | % > 400: | %Conf: | | | | | | | | | |
| 58 | 130.7 | 12 | 20.7 | 62.7 | | | | | | | | | |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: ANGOLA CRK AT NC 53 NR MAPLE HILL

Station #: B9490000

Hydrologic Unit Code: 03030007

Latitude: 34.65617

Longitude: -77.73508

Stream class: C Sw

Agency: LCFRP

NC stream index: 18-74-33-3

Time period: 01/19/2006 to 12/13/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|---|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 60 | 0 | N/A | | | | 0.3 | 1.3 | 3.2 | 5.6 | 7.6 | 10.7 | 11.7 |
| pH (SU) | 60 | 0 | <4.3 | 0 | 0 | | 4.3 | 4.9 | 5.5 | 6 | 6.6 | 7 | 7.2 |
| | 60 | 0 | >9 | 0 | 0 | | 4.3 | 4.9 | 5.5 | 6 | 6.6 | 7 | 7.2 |
| Spec. conductance (umhos/cm at 25°C) | 60 | 10 | N/A | | | | 61 | 82 | 100 | 111 | 156 | 198 | 219 |
| Water Temperature (°C) | 60 | 0 | >32 | 0 | 0 | | 4.7 | 7.9 | 12.2 | 18.4 | 24.1 | 26.7 | 30.3 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 9 | N/A | | | | 2 | 2 | 2.7 | 3 | 5 | 6 | 27 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 2 | N/A | | | | 0.01 | 0.01 | 0.03 | 0.06 | 0.1 | 0.19 | 0.32 |
| NO2 + NO3 as N | 60 | 17 | N/A | | | | 0.02 | 0.02 | 0.02 | 0.08 | 0.19 | 0.52 | 1.84 |
| TKN as N | 60 | 0 | N/A | | | | 0.4 | 0.81 | 1 | 1.3 | 1.5 | 1.8 | 9.2 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.03 | 0.05 | 0.09 | 0.14 | 0.2 | 0.24 | 0.36 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 91.1 | 5 | 8.3 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: BURGAW CRK AT SR 1345 WRIGHT ST AT BURGAW
Station #: B9500000 **Hydrologic Unit Code:** 03030007
Latitude: 34.56334 **Longitude:** -77.93481 **Stream class:** C Sw
Agency: LCFRP **NC stream index:** 18-74-39

Time period: 01/19/2006 to 12/13/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|------|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 60 | 0 | N/A | | | | 0.2 | 0.7 | 1.9 | 5.6 | 8.2 | 10.5 | 11.9 |
| pH (SU) | 60 | 0 | <4.3 | 0 | 0 | | 5.5 | 6 | 6.5 | 6.8 | 7.2 | 7.3 | 8.2 |
| | 60 | 0 | >9 | 0 | 0 | | 5.5 | 6 | 6.5 | 6.8 | 7.2 | 7.3 | 8.2 |
| Spec. conductance (umhos/cm at 25°C) | 60 | 5 | N/A | | | | 100 | 108 | 140 | 211 | 259 | 292 | 598 |
| Water Temperature (°C) | 60 | 0 | >32 | 0 | 0 | | 3.3 | 6.9 | 11 | 16.3 | 22.6 | 24.5 | 27.3 |
| Other | | | | | | | | | | | | | |
| Chlorophyll a (ug/L) | 24 | 1 | >40 | 3 | 12.5 | 78.6 | 1 | 1 | 1 | 5 | 15 | 214 | 302 |
| TSS (mg/L) | 60 | 0 | N/A | | | | 2 | 4 | 5 | 7 | 10 | 15 | 118 |
| Turbidity (NTU) | 60 | 0 | >50 | 1 | 1.7 | | 4 | 5.9 | 8 | 10.5 | 13.2 | 17.9 | 54 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 1 | N/A | | | | 0.01 | 0.01 | 0.03 | 0.05 | 0.17 | 0.35 | 0.93 |
| NO2 + NO3 as N | 60 | 5 | N/A | | | | 0.02 | 0.03 | 0.07 | 0.12 | 0.22 | 0.65 | 1.93 |
| TKN as N | 60 | 1 | N/A | | | | 0.2 | 0.4 | 0.6 | 0.84 | 1.2 | 1.9 | 2.8 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.02 | 0.04 | 0.08 | 0.15 | 0.25 | 0.37 | 0.86 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: | %Conf: |
|------------|---------|----------|----------|--------|
| 60 | 288.1 | 22 | 36.7 | 99.9 |

Key:

result: number of observations
 # ND: number of observations reported to be below detection level (non-detect)
 EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
 Results not meeting EL: number and percentages of observations not meeting evaluation level
 %Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
 Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: BURGAW CRK AT US 117 AT BURGAW
Station #: B9520000
Latitude: 34.56375 **Longitude:** -77.92202
Agency: LCFRP

Hydrologic Unit Code: 03030007
Stream class: C Sw
NC stream index: 18-74-39

Time period: 01/19/2006 to 12/13/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--|----------------|--------------------|--------------------|------------------------|-----|-------|-------------|------|------|------|-------|-------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 60 | 0 | N/A | | | | 3 | 4.1 | 5.5 | 6.5 | 9.3 | 10.6 | 12.8 |
| pH (SU) | 60 | 0 | <4.3 | 0 | 0 | | 6.3 | 6.7 | 7.1 | 7.4 | 7.6 | 7.8 | 8 |
| | 60 | 0 | >9 | 0 | 0 | | 6.3 | 6.7 | 7.1 | 7.4 | 7.6 | 7.8 | 8 |
| Spec. conductance (umhos/cm at 25°C) | 60 | 0 | N/A | | | | 130 | 213 | 313 | 510 | 884 | 1151 | 1258 |
| Water Temperature (°C) | 60 | 0 | >32 | 0 | 0 | | 3.7 | 7.4 | 12 | 17.6 | 22.6 | 25.6 | 28 |
| Other | | | | | | | | | | | | | |
| Chlorophyll a (ug/L) | 24 | 0 | >40 | 0 | 0 | | 1 | 1 | 1 | 2 | 5 | 12 | 29 |
| TSS (mg/L) | 60 | 0 | N/A | | | | 3 | 4 | 5.2 | 7.5 | 12 | 17.8 | 110 |
| Turbidity (NTU) | 60 | 0 | >50 | 1 | 1.7 | | 4.6 | 6 | 7.3 | 9.8 | 12.3 | 18.7 | 119 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 0 | N/A | | | | 0.01 | 0.03 | 0.05 | 0.08 | 0.13 | 0.21 | 6.51 |
| NO2 + NO3 as N | 60 | 0 | N/A | | | | 0.25 | 0.45 | 2.39 | 6.33 | 13.88 | 24.54 | 76.61 |
| TKN as N | 60 | 9 | N/A | | | | 0.1 | 0.2 | 0.4 | 0.87 | 1.2 | 1.77 | 11.29 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.15 | 0.21 | 0.42 | 0.9 | 2.33 | 3.55 | 4.28 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 8 | 0 | N/A | | | | 202 | 202 | 214 | 256 | 356 | 437 | 437 |
| Arsenic, total (As) | 8 | 8 | >10 | 0 | 0 | | 1 | 1 | 4 | 10 | 10 | 10 | 10 |
| Cadmium, total (Cd) | 8 | 8 | >2 | 0 | 0 | | 1 | 1 | 1.2 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 8 | 7 | >50 | 0 | 0 | | 5 | 5 | 15 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 8 | 8 | >7 | 0 | 0 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Iron, total (Fe) | 8 | 0 | >1000 | 2 | 25 | | 398 | 398 | 507 | 728 | 1078 | 1890 | 1890 |
| Lead, total (Pb) | 8 | 8 | >25 | 0 | 0 | | 3 | 3 | 5 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 8 | 8 | >0.012 | 0 | 0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel, total (Ni) | 8 | 8 | >88 | 0 | 0 | | 5 | 5 | 6 | 10 | 10 | 10 | 10 |
| Zinc, total (Zn) | 8 | 4 | >50 | 0 | 0 | | 7 | 7 | 8 | 10 | 12 | 31 | 31 |
| Fecal Coliform Screening(#/100mL) | | | | | | | | | | | | | |
| # results: | Geomean | # > 400: | % > 400: | %Conf: | | | | | | | | | |
| 60 | 547.9 | 37 | 61.7 | 100 | | | | | | | | | |

Key:

result: number of observations
 # ND: number of observations reported to be below detection level (non-detect)
 EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
 Results not meeting EL: number and percentages of observations not meeting evaluation level
 %Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
 Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: NORTHEAST CAPE FEAR RIV AT US 117 AT CASTLE HAYNE

Station #: B9580000

Hydrologic Unit Code: 03030007

Latitude: 34.36366

Longitude: -77.89645

Stream class: B Sw

Agency: LCFRP

NC stream index: 18-74-(47.5)

Time period: 01/11/2006 to 12/02/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|---|--------------|---------|--------|------------------------|---|-------|-------------|------|------|------|------|------|------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 59 | 0 | N/A | | | | 2.9 | 3.7 | 4.4 | 5.8 | 8.2 | 10.2 | 11.1 |
| pH (SU) | 60 | 0 | <4.3 | 0 | 0 | | 5.7 | 5.9 | 6.2 | 6.5 | 6.7 | 6.9 | 7.6 |
| | 60 | 0 | >9 | 0 | 0 | | 5.7 | 5.9 | 6.2 | 6.5 | 6.7 | 6.9 | 7.6 |
| Spec. conductance (umhos/cm at 25°C) | 59 | 3 | N/A | | | | 87 | 101 | 121 | 154 | 206 | 298 | 4566 |
| Water Temperature (°C) | 60 | 0 | >32 | 0 | 0 | | 6.2 | 8.2 | 11.7 | 20.1 | 26.6 | 29.8 | 30.8 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 1 | N/A | | | | 1 | 2 | 3 | 4 | 5 | 6 | 10 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 5 | N/A | | | | 0.01 | 0.01 | 0.02 | 0.03 | 0.05 | 0.08 | 0.15 |
| NO2 + NO3 as N | 60 | 0 | N/A | | | | 0.02 | 0.11 | 0.15 | 0.21 | 0.35 | 0.5 | 1.02 |
| TKN as N | 60 | 0 | N/A | | | | 0.2 | 0.41 | 0.66 | 0.77 | 1 | 1.09 | 1.49 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.04 | 0.04 | 0.06 | 0.08 | 0.12 | 0.15 | 0.81 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 8 | 1 | N/A | | | | 50 | 50 | 184 | 390 | 520 | 693 | 693 |
| Arsenic, total (As) | 8 | 8 | >10 | 0 | 0 | | 1 | 1 | 4 | 10 | 10 | 10 | 10 |
| Cadmium, total (Cd) | 8 | 8 | >2 | 0 | 0 | | 1 | 1 | 1.2 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 8 | 8 | >50 | 0 | 0 | | 5 | 5 | 10 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 8 | 8 | >7 | 0 | 0 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Iron, total (Fe) | 8 | 0 | >1000 | 0 | 0 | | 456 | 456 | 527 | 610 | 735 | 927 | 927 |
| Lead, total (Pb) | 8 | 8 | >25 | 0 | 0 | | 3 | 3 | 5 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 8 | 8 | >0.012 | 0 | 0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel, total (Ni) | 8 | 8 | >88 | 0 | 0 | | 5 | 5 | 6 | 10 | 10 | 10 | 10 |
| Zinc, total (Zn) | 8 | 6 | >50 | 0 | 0 | | 5 | 5 | 8 | 10 | 10 | 18 | 18 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 67.8 | 4 | 6.7 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: NORTHEAST CAPE FEAR RIV NR WRIGHTSBORO

Station #: B9670000

Hydrologic Unit Code: 03030007

Latitude: 34.31526

Longitude: -77.95307

Stream class: C Sw

Agency: LCFRP

NC stream index: 18-74-(52.5)

Time period: 01/11/2006 to 12/09/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|---|-------|-------------|------|------|------|-------|-------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 207 | 0 | N/A | | | | 2.1 | 3.9 | 4.4 | 5.9 | 7.7 | 9.3 | 11.3 |
| pH (SU) | 207 | 0 | <4.3 | 0 | 0 | | 5.5 | 6.3 | 6.5 | 6.8 | 7 | 7.1 | 7.6 |
| | 207 | 0 | >9 | 0 | 0 | | 5.5 | 6.3 | 6.5 | 6.8 | 7 | 7.1 | 7.6 |
| Spec. conductance (umhos/cm at 25°C) | 207 | 12 | N/A | | | | 73 | 100 | 190 | 1335 | 10580 | 24027 | 35722 |
| Water Temperature (°C) | 207 | 0 | >32 | 0 | 0 | | 3.1 | 11.1 | 14.3 | 23 | 27.5 | 29.3 | 31.2 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 0 | N/A | | | | 2 | 3.2 | 7 | 13 | 22 | 39.8 | 86 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 2 | N/A | | | | 0.01 | 0.01 | 0.02 | 0.04 | 0.05 | 0.08 | 0.3 |
| NO2 + NO3 as N | 60 | 1 | N/A | | | | 0.02 | 0.11 | 0.18 | 0.27 | 0.41 | 0.52 | 0.94 |
| TKN as N | 60 | 1 | N/A | | | | 0.2 | 0.4 | 0.6 | 0.8 | 1 | 1.19 | 2.1 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.04 | 0.06 | 0.08 | 0.1 | 0.13 | 0.17 | 0.24 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 47.1 | 1 | 1.7 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: SMITH CRK AT US 117 AND NC 133 AT WILMINGTON

Station #: B9720000

Hydrologic Unit Code: 03030007

Latitude: 34.25861

Longitude: -77.93913

Stream class: C Sw

Agency: LCFRP

NC stream index: 18-74-63

Time period: 02/23/2006 to 12/02/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|---|--------------|---------|------|------------------------|---|-------|-------------|------|------|------|-------|-------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 59 | 0 | N/A | | | | 3.1 | 3.9 | 4.6 | 6.4 | 8.3 | 9.8 | 11.3 |
| pH (SU) | 59 | 0 | <4.3 | 0 | 0 | | 5.8 | 6 | 6.5 | 6.9 | 7 | 7.2 | 7.8 |
| | 59 | 0 | >9 | 0 | 0 | | 5.8 | 6 | 6.5 | 6.9 | 7 | 7.2 | 7.8 |
| Spec. conductance (umhos/cm at 25°C) | 58 | 3 | N/A | | | | 100 | 186 | 849 | 6078 | 12962 | 20389 | 36796 |
| Water Temperature (°C) | 59 | 0 | >32 | 0 | 0 | | 6.4 | 8.8 | 13 | 21.8 | 27.9 | 29.8 | 30.9 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: | %Conf: |
|------------|---------|----------|----------|--------|
| 59 | 77.9 | 5 | 8.5 | |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: BRUNSWICK RIV DNS US 17 AT PARK NR BELVILLE
Station #: B9790000 **Hydrologic Unit Code:** 03030005
Latitude: 34.22045 **Longitude:** -77.97966 **Stream class:** SC
Agency: LCFRP **NC stream index:** 18-77

Time period: 01/10/2006 to 12/15/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|---|-----------|------|------|------------------------|-----|--------|-------------|------|------|------|-------|-------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 172 | 0 | <5 | 55 | 32 | > 99.9 | 2.7 | 4.1 | 4.7 | 6.5 | 8.4 | 10.4 | 12.1 |
| pH (SU) | 172 | 0 | <6.8 | 9 | 5.2 | | 6.2 | 6.9 | 7 | 7.2 | 7.4 | 7.6 | 7.9 |
| | 172 | 0 | >8.5 | 0 | 0 | | 6.2 | 6.9 | 7 | 7.2 | 7.4 | 7.6 | 7.9 |
| Spec. conductance (umhos/cm at 25°C) | 172 | 8 | N/A | | | | 90 | 125 | 503 | 6576 | 14964 | 23978 | 39030 |
| Water Temperature (°C) | 172 | 0 | >32 | 1 | 0.6 | | 3.4 | 9.1 | 12.6 | 20.2 | 27 | 29.4 | 32.3 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 0 | N/A | | | | 4 | 6 | 8 | 11 | 15 | 19.9 | 35 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 1 | N/A | | | | 0.01 | 0.01 | 0.04 | 0.06 | 0.09 | 0.12 | 0.23 |
| NO2 + NO3 as N | 60 | 0 | N/A | | | | 0.04 | 0.2 | 0.34 | 0.43 | 0.57 | 0.71 | 0.77 |
| TKN as N | 60 | 2 | N/A | | | | 0.1 | 0.31 | 0.5 | 0.7 | 0.78 | 0.93 | 1.7 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.03 | 0.07 | 0.09 | 0.1 | 0.13 | 0.17 | 0.2 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 41.8 | 1 | 1.7 |

Key:

result: number of observations
 # ND: number of observations reported to be below detection level (non-detect)
 EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
 Results not meeting EL: number and percentages of observations not meeting evaluation level
 %Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
 Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: CAPE FEAR RIV AT CM 54

Station #: B9795000

Hydrologic Unit Code: 03030005

Latitude: 34.13933

Longitude: -77.94595

Stream class: SC

Agency: LCFRP

NC stream index: 18-(71)

Time period: 01/10/2006 to 12/15/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|--------|------------------------|------|--------|-------------|------|-------|-------|-------|-------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 207 | 0 | <5 | 50 | 24.2 | > 99.9 | 3.2 | 4.4 | 5 | 6.4 | 8.1 | 9.7 | 11.7 |
| pH (SU) | 207 | 0 | <6.8 | 11 | 5.3 | | 6.3 | 7.1 | 7.4 | 7.5 | 7.7 | 7.8 | 8.1 |
| | 207 | 0 | >8.5 | 0 | 0 | | 6.3 | 7.1 | 7.4 | 7.5 | 7.7 | 7.8 | 8.1 |
| Spec. conductance (umhos/cm at 25°C) | 207 | 0 | N/A | | | | 99 | 3362 | 13722 | 23216 | 31209 | 36072 | 45700 |
| Water Temperature (°C) | 207 | 0 | >32 | 0 | 0 | | 4.3 | 10 | 14.1 | 23.5 | 28.1 | 29.2 | 31.3 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 0 | N/A | | | | 5 | 8 | 9.2 | 12.5 | 17 | 33.9 | 71 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 3 | N/A | | | | 0.01 | 0.02 | 0.04 | 0.08 | 0.12 | 0.16 | 0.24 |
| NO2 + NO3 as N | 60 | 0 | N/A | | | | 0.04 | 0.11 | 0.21 | 0.31 | 0.44 | 0.57 | 0.73 |
| TKN as N | 60 | 0 | N/A | | | | 0.1 | 0.3 | 0.43 | 0.6 | 0.8 | 1.06 | 1.45 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.03 | 0.06 | 0.07 | 0.1 | 0.11 | 0.14 | 0.18 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 8 | 0 | N/A | | | | 17 | 17 | 168 | 282 | 388 | 898 | 898 |
| Arsenic, total (As) | 8 | 7 | >10 | 0 | 0 | | 1 | 1 | 6 | 10 | 10 | 10 | 10 |
| Cadmium, total (Cd) | 8 | 7 | >5 | 0 | 0 | | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 8 | 6 | >20 | 0 | 0 | | 10 | 10 | 19 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 8 | 8 | >3 | 0 | 0 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Iron, total (Fe) | 8 | 0 | N/A | | | | 174 | 174 | 344 | 502 | 636 | 1080 | 1080 |
| Lead, total (Pb) | 8 | 7 | >25 | 0 | 0 | | 3 | 3 | 7 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 8 | 8 | >0.025 | 0 | 0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel, total (Ni) | 8 | 7 | >8.3 | 1 | 12.5 | | 5 | 5 | 10 | 10 | 10 | 10 | 10 |
| Zinc, total (Zn) | 8 | 7 | >86 | 0 | 0 | | 5 | 5 | 10 | 10 | 10 | 13 | 13 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 25.5 | 1 | 1.7 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: CAPE FEAR RIV AT CM 61 AT WILMINGTON

Station #: B9800000

Hydrologic Unit Code: 03030005

Latitude: 34.19431

Longitude: -77.95679

Stream class: SC

Agency: LCFRP

NC stream index: 18-(71)

Time period: 01/10/2006 to 12/15/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|------|--------|-------------|------|------|-------|-------|-------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 207 | 0 | <5 | 74 | 35.7 | > 99.9 | 2.7 | 3.6 | 4.6 | 6 | 8.2 | 9.6 | 11.5 |
| pH (SU) | 207 | 0 | <6.8 | 19 | 9.2 | | 6 | 6.8 | 7 | 7.3 | 7.4 | 7.6 | 8 |
| | 207 | 0 | >8.5 | 0 | 0 | | 6 | 6.8 | 7 | 7.3 | 7.4 | 7.6 | 8 |
| Spec. conductance (umhos/cm at 25°C) | 207 | 6 | N/A | | | | 99 | 1004 | 6956 | 17819 | 25906 | 31906 | 43239 |
| Water Temperature (°C) | 207 | 0 | >32 | 0 | 0 | | 4.2 | 9.9 | 14.1 | 23.3 | 28.1 | 29.3 | 31.7 |
| Other | | | | | | | | | | | | | |
| Chlorophyll a (ug/L) | 25 | 1 | >40 | 0 | 0 | | 1 | 2 | 5 | 8 | 14 | 22 | 24 |
| TSS (mg/L) | 60 | 0 | N/A | | | | 5 | 7 | 9 | 10 | 13.8 | 18 | 35 |
| Turbidity (NTU) | 60 | 0 | >25 | 3 | 5 | | 3.3 | 5.4 | 6.2 | 7.9 | 9.9 | 18 | 42.2 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 1 | N/A | | | | 0.01 | 0.02 | 0.04 | 0.07 | 0.1 | 0.12 | 0.25 |
| NO2 + NO3 as N | 60 | 0 | N/A | | | | 0.02 | 0.11 | 0.27 | 0.34 | 0.47 | 0.63 | 0.96 |
| TKN as N | 60 | 2 | N/A | | | | 0.1 | 0.21 | 0.5 | 0.69 | 0.8 | 1 | 1.5 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.04 | 0.07 | 0.07 | 0.09 | 0.11 | 0.13 | 0.16 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: | %Conf: |
|------------|---------|----------|----------|--------|
| 60 | 31.2 | 1 | 1.7 | |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: CAPE FEAR RIV AT CM 42

Station #: B9845100

Hydrologic Unit Code: 03030005

Latitude: 34.09017

Longitude: -77.93355

Stream class: SC

Agency: LCFRP

NC stream index: 18-(71)

Time period: 01/10/2006 to 12/10/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|-----|--------|-------------|------|-------|-------|-------|-------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 207 | 0 | <5 | 31 | 15 | > 99.9 | 3.2 | 4.7 | 5.3 | 6.8 | 8.2 | 9.6 | 11.5 |
| pH (SU) | 207 | 0 | <6.8 | 3 | 1.4 | | 6.5 | 7.3 | 7.5 | 7.7 | 7.8 | 7.9 | 8.3 |
| | 207 | 0 | >8.5 | 0 | 0 | | 6.5 | 7.3 | 7.5 | 7.7 | 7.8 | 7.9 | 8.3 |
| Spec. conductance (umhos/cm at 25°C) | 207 | 0 | N/A | | | | 218 | 8353 | 18751 | 28667 | 35847 | 40421 | 48579 |
| Water Temperature (°C) | 207 | 0 | >32 | 0 | 0 | | 4.6 | 10.3 | 14.2 | 23.2 | 27.8 | 29.1 | 31.1 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 0 | N/A | | | | 5 | 7 | 8.2 | 12.5 | 17 | 21.9 | 57 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 4 | N/A | | | | 0.01 | 0.01 | 0.02 | 0.06 | 0.08 | 0.11 | 0.12 |
| NO2 + NO3 as N | 60 | 1 | N/A | | | | 0.02 | 0.08 | 0.17 | 0.28 | 0.37 | 0.52 | 0.7 |
| TKN as N | 60 | 1 | N/A | | | | 0.1 | 0.2 | 0.4 | 0.6 | 0.83 | 1.09 | 6.2 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.03 | 0.05 | 0.06 | 0.08 | 0.09 | 0.11 | 0.14 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 16.4 | 1 | 1.7 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: CAPE FEAR RIV AT CM 35
Station #: B9850100
Latitude: 34.03348 **Longitude:** -77.93702
Agency: LCFRP

Hydrologic Unit Code: 03030005
Stream class: SC
NC stream index: 18-(71)

Time period: 01/10/2006 to 12/10/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|--------|------------------------|-----|-------|-------------|-------|-------|-------|-------|-------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 207 | 0 | <5 | 19 | 9.2 | | 3.6 | 5 | 5.5 | 6.9 | 8.2 | 9.6 | 11.4 |
| pH (SU) | 207 | 0 | <6.8 | 0 | 0 | | 6.9 | 7.5 | 7.7 | 7.8 | 7.9 | 8 | 8.3 |
| | 207 | 0 | >8.5 | 0 | 0 | | 6.9 | 7.5 | 7.7 | 7.8 | 7.9 | 8 | 8.3 |
| Spec. conductance (umhos/cm at 25°C) | 207 | 0 | N/A | | | | 2282 | 16784 | 26394 | 33805 | 39991 | 45048 | 50527 |
| Water Temperature (°C) | 207 | 0 | >32 | 0 | 0 | | 5 | 10.6 | 14.2 | 23.5 | 28 | 29.2 | 31.2 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 60 | 0 | N/A | | | | 4 | 6 | 8 | 10.5 | 13.8 | 18.9 | 24 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 60 | 8 | N/A | | | | 0.01 | 0.01 | 0.01 | 0.04 | 0.06 | 0.09 | 0.12 |
| NO2 + NO3 as N | 60 | 1 | N/A | | | | 0.02 | 0.05 | 0.11 | 0.2 | 0.3 | 0.4 | 0.63 |
| TKN as N | 60 | 3 | N/A | | | | 0.1 | 0.2 | 0.21 | 0.43 | 0.6 | 0.89 | 1.8 |
| Total Phosphorus | 60 | 0 | N/A | | | | 0.03 | 0.04 | 0.05 | 0.06 | 0.08 | 0.09 | 0.12 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 7 | 0 | N/A | | | | 38 | 38 | 176 | 267 | 464 | 611 | 611 |
| Arsenic, total (As) | 7 | 7 | >10 | 0 | 0 | | 1 | 1 | 10 | 10 | 10 | 10 | 10 |
| Cadmium, total (Cd) | 7 | 7 | >5 | 0 | 0 | | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 7 | 7 | >20 | 0 | 0 | | 5 | 5 | 25 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 7 | 7 | >3 | 0 | 0 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Iron, total (Fe) | 7 | 0 | N/A | | | | 225 | 225 | 285 | 342 | 491 | 923 | 923 |
| Lead, total (Pb) | 7 | 7 | >25 | 0 | 0 | | 3 | 3 | 10 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 7 | 7 | >0.025 | 0 | 0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel, total (Ni) | 7 | 7 | >8.3 | 0 | 0 | | 5 | 5 | 10 | 10 | 10 | 10 | 10 |
| Zinc, total (Zn) | 7 | 5 | >86 | 0 | 0 | | 10 | 10 | 10 | 10 | 10 | 15 | 15 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: %Conf: |
|------------|---------|----------|-----------------|
| 60 | 9.7 | 1 | 1.7 |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: CAPE FEAR RIV AT CM 23

Station #: B9910000

Latitude: 33.94560

Agency: LCFRP

Longitude: -77.96958

Hydrologic Unit Code: 03030005

Stream class: SA HQW

NC stream index: 18-(87.5)

Time period: 01/10/2006 to 12/10/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--|-------------------|----------------|--------|------------------------|--------------------|---------------|--------------|------------------|------------------|--------------|-------|-------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 206 | 0 | <5 | 5 | 2.4 | | 4.3 | 5.5 | 5.9 | 6.9 | 8.4 | 9.3 | 11.4 |
| pH (SU) | 206 | 0 | <6.8 | 0 | 0 | | 7.3 | 7.8 | 7.9 | 7.9 | 8 | 8.1 | 8.2 |
| | 206 | 0 | >8.5 | 0 | 0 | | 7.3 | 7.8 | 7.9 | 7.9 | 8 | 8.1 | 8.2 |
| Spec. conductance (umhos/cm at 25°C) | 206 | 0 | N/A | | | | 11124 | 30787 | 38567 | 44754 | 48794 | 50852 | 53702 |
| Water Temperature (°C) | 206 | 0 | >32 | 0 | 0 | | 6 | 11.2 | 15.1 | 23 | 27.7 | 29 | 30.5 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 59 | 0 | N/A | | | | 4 | 7 | 8 | 10 | 14 | 24 | 36 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 59 | 18 | N/A | | | | 0.01 | 0.01 | 0.01 | 0.02 | 0.03 | 0.05 | 0.1 |
| NO2 + NO3 as N | 59 | 12 | N/A | | | | 0.02 | 0.02 | 0.03 | 0.11 | 0.19 | 0.28 | 0.54 |
| TKN as N | 59 | 3 | N/A | | | | 0.1 | 0.2 | 0.2 | 0.3 | 0.6 | 1 | 2.2 |
| Total Phosphorus | 59 | 4 | N/A | | | | 0.02 | 0.02 | 0.03 | 0.04 | 0.05 | 0.07 | 0.31 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 7 | 0 | N/A | | | | 41 | 41 | 110 | 203 | 318 | 405 | 405 |
| Arsenic, total (As) | 7 | 7 | >10 | 0 | 0 | | 1 | 1 | 10 | 10 | 10 | 10 | 10 |
| Cadmium, total (Cd) | 7 | 7 | >5 | 0 | 0 | | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 7 | 7 | >20 | 0 | 0 | | 5 | 5 | 25 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 7 | 7 | >3 | 0 | 0 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Iron, total (Fe) | 7 | 0 | N/A | | | | 245 | 245 | 262 | 289 | 412 | 573 | 573 |
| Lead, total (Pb) | 7 | 7 | >25 | 0 | 0 | | 3 | 3 | 10 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 7 | 7 | >0.025 | 0 | 0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel, total (Ni) | 7 | 7 | >8.3 | 0 | 0 | | 5 | 5 | 10 | 10 | 10 | 10 | 10 |
| Zinc, total (Zn) | 7 | 5 | >86 | 0 | 0 | | 8 | 8 | 10 | 10 | 10 | 14 | 14 |
| Fecal Coliform Screening(#/100mL) | | | | | | | | | | | | | |
| | # results: | Geomean | | # > 400: | % > 400: | %Conf: | Media | # > 43 | % > 43 | %Conf | | | |
| | 59 | 6 | | 0 | 0 | | 6 | 3 | 5 | | | | |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: CAPE FEAR RIV AT CM 18
Station #: B9921000
Latitude: 33.91131 **Longitude:** -78.01658
Agency: LCFRP

Hydrologic Unit Code: 03030005
Stream class: SC
NC stream index: 18-88-3.5

Time period: 01/10/2006 to 12/10/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--|----------------|--------------------|--------------------|------------------------|------|-------|-------------|-------|-------|-------|-------|-------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 206 | 0 | <5 | 3 | 1.5 | | 4.6 | 5.7 | 6 | 7 | 8.2 | 9.2 | 10.6 |
| pH (SU) | 206 | 0 | <6.8 | 0 | 0 | | 7.5 | 7.8 | 7.9 | 8 | 8 | 8.1 | 8.3 |
| | 206 | 0 | >8.5 | 0 | 0 | | 7.5 | 7.8 | 7.9 | 8 | 8 | 8.1 | 8.3 |
| Spec. conductance (umhos/cm at 25°C) | 206 | 0 | N/A | | | | 15888 | 34010 | 42447 | 48022 | 50654 | 52724 | 80770 |
| Water Temperature (°C) | 206 | 0 | >32 | 0 | 0 | | 5.9 | 11.3 | 15 | 22.8 | 27.7 | 28.8 | 31.2 |
| Other | | | | | | | | | | | | | |
| Chlorophyll a (ug/L) | 24 | 0 | >40 | 0 | 0 | | 2 | 4 | 5 | 8 | 10 | 13 | 15 |
| TSS (mg/L) | 59 | 0 | N/A | | | | 5 | 7 | 8 | 11 | 19 | 29 | 53 |
| Turbidity (NTU) | 59 | 0 | >25 | 2 | 3.4 | | 2.4 | 3.6 | 4.2 | 5.5 | 8.9 | 18.7 | 59 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 59 | 34 | N/A | | | | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.03 | 0.09 |
| NO2 + NO3 as N | 59 | 24 | N/A | | | | 0.02 | 0.02 | 0.02 | 0.04 | 0.12 | 0.21 | 1.72 |
| TKN as N | 59 | 6 | N/A | | | | 0.1 | 0.1 | 0.2 | 0.2 | 0.5 | 0.7 | 1.63 |
| Total Phosphorus | 59 | 5 | N/A | | | | 0.02 | 0.02 | 0.03 | 0.04 | 0.05 | 0.07 | 0.12 |
| Metals (ug/L) | | | | | | | | | | | | | |
| Aluminum, total (Al) | 8 | 1 | N/A | | | | 5 | 5 | 158 | 185 | 338 | 392 | 392 |
| Arsenic, total (As) | 8 | 7 | >10 | 0 | 0 | | 1 | 1 | 8 | 10 | 10 | 10 | 10 |
| Cadmium, total (Cd) | 8 | 7 | >5 | 0 | 0 | | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| Chromium, total (Cr) | 8 | 7 | >20 | 0 | 0 | | 5 | 5 | 21 | 25 | 25 | 25 | 25 |
| Copper, total (Cu) | 8 | 7 | >3 | 1 | 12.5 | | 2 | 2 | 2 | 2 | 2 | 86 | 86 |
| Iron, total (Fe) | 8 | 0 | N/A | | | | 46 | 46 | 246 | 340 | 369 | 393 | 393 |
| Lead, total (Pb) | 8 | 8 | >25 | 0 | 0 | | 3 | 3 | 5 | 10 | 10 | 10 | 10 |
| Mercury, total (Hg) | 8 | 8 | >0.025 | 0 | 0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel, total (Ni) | 8 | 6 | >8.3 | 2 | 25 | | 5 | 5 | 10 | 10 | 10 | 16 | 16 |
| Zinc, total (Zn) | 8 | 5 | >86 | 1 | 12.5 | | 9 | 9 | 10 | 10 | 10 | 133 | 133 |
| Fecal Coliform Screening(#/100mL) | | | | | | | | | | | | | |
| # results: | Geomean | # > 400: | % > 400: | %Conf: | | | | | | | | | |
| 59 | 5.6 | 0 | 0 | | | | | | | | | | |

Key:

result: number of observations
 # ND: number of observations reported to be below detection level (non-detect)
 EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
 Results not meeting EL: number and percentages of observations not meeting evaluation level
 %Conf: States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
 Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station
 NCDENR, Division of Water Quality
 Basinwide Assessment

Location: ICW NR SOUTHPORT

Station #: B9980000

Latitude: 33.91732

Agency: LCFRP

Longitude: -78.03794

Hydrologic Unit Code: 03030005

Stream class: SA HQW

NC stream index: 18-88-9

Time period: 01/10/2006 to 12/10/2010

| | # results | # ND | EL | Results not meeting EL | | | Percentiles | | | | | | |
|--------------------------------------|-----------|------|------|------------------------|------|--------|-------------|-------|-------|-------|-------|-------|-------|
| | | | | # | % | %Conf | Min | 10th | 25th | 50th | 75th | 90th | Max |
| Field | | | | | | | | | | | | | |
| D.O. (mg/L) | 206 | 0 | <5 | 28 | 13.6 | > 99.9 | 4.1 | 4.8 | 5.3 | 6.7 | 8.2 | 9.4 | 11.4 |
| pH (SU) | 206 | 0 | <6.8 | 0 | 0 | | 7.2 | 7.6 | 7.7 | 7.8 | 7.9 | 8 | 8.4 |
| | 206 | 0 | >8.5 | 0 | 0 | | 7.2 | 7.6 | 7.7 | 7.8 | 7.9 | 8 | 8.4 |
| Spec. conductance (umhos/cm at 25°C) | 206 | 0 | N/A | | | | 12276 | 32526 | 37084 | 44064 | 48554 | 51415 | 53515 |
| Water Temperature (°C) | 206 | 0 | >32 | 1 | 0.5 | | 5.3 | 10.7 | 14.8 | 24 | 28.1 | 29.5 | 33.9 |
| Other | | | | | | | | | | | | | |
| TSS (mg/L) | 59 | 0 | N/A | | | | 7 | 8 | 12 | 17 | 23 | 32 | 55 |
| Nutrients (mg/L) | | | | | | | | | | | | | |
| NH3 as N | 58 | 22 | N/A | | | | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.04 | 0.08 |
| NO2 + NO3 as N | 59 | 19 | N/A | | | | 0.02 | 0.02 | 0.02 | 0.05 | 0.11 | 0.18 | 0.51 |
| TKN as N | 59 | 3 | N/A | | | | 0.1 | 0.2 | 0.2 | 0.4 | 0.5 | 0.7 | 5.27 |
| Total Phosphorus | 58 | 4 | N/A | | | | 0.02 | 0.02 | 0.03 | 0.04 | 0.05 | 0.07 | 0.1 |

Fecal Coliform Screening(#/100mL)

| # results: | Geomean | # > 400: | % > 400: | %Conf: | Media | # > 43 | % > 43 | %Conf |
|------------|---------|----------|----------|--------|-------|--------|--------|-------|
| 59 | 7 | 0 | 0 | | 9 | 3 | 5 | |

Key:

result: number of observations

ND: number of observations reported to be below detection level (non-detect)

EL: Evaluation Level; applicable numeric or narrative water quality standard or action level

Results not meeting EL: number and percentages of observations not meeting evaluation level

%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)

Stations with less than 10 results for a given parameter were not evaluated for statistical confidence