

IMPAIRED AND IMPACTED STREAM/WATERSHED SURVEY

Please review and answer as many of the questions below as possible to the best of your ability. If you are not sure of how to answer a question, leave it blank and your basin planner will contact appropriate people for the answer. Please submit this document electronically to the North Carolina Division of Water Quality Basinwide Planning Unit. Details can be found on the last page of this survey.

Your Name: _____ Date: _____

Address: _____

Phone: _____ E-mail: _____

Completing this survey is voluntary. Submitted information will help guide resource agency staff to conduct further investigations, assessments, identify funding sources, and/or implement remedial actions.

Stream Name: _____

River Basin: _____ Subbasin: _____

Assessment Unit Number: _____

HUC (8 and/or 12-Digit Watershed Code): _____

GPS Coordinates: (Lat.) _____ (Long.) _____

County: _____ Municipality: _____

Weather in the past 24 hours:

☐ Heavy rain ☐ Steady rain ☐ Intermittent showers ☐ Overcast ☐ Clear/sunny

Weather conditions during survey:

☐ Heavy rain ☐ Steady rain ☐ Intermittent showers ☐ Overcast ☐ Clear/sunny

Is this stream listed as ☐ Impaired or ☐ Impacted? (Refer to the Assessment and Use Support Table in the DWQ Basinwide Plan or Integrated Report.)

Refer to the Stressors & Sources column in the Assessment and Use Support Table found in the Basinwide Plan or Integrated Report:

Noted Stressors: _____

Noted Sources: _____

Description of stream location and length as identified in the most recent Integrated Report or Basinwide Plan (Example: from source to confluence with Dan River):

Date of most recent Basinwide Plan: _____

Brief description of what the plan says about this stream: _____

Is there a current active monitoring program on this stream segment? ☐ Yes ☐ No.

If yes, what are the samples showing? _____

Does the watershed encompass a Public Water Supply? ☐ Yes ☐ No.

If yes, please list the name of the public water supply: _____

PART I: In-Stream at the Impaired or Impacted stream segment - This area includes the streambed and streambanks throughout the named Impaired or Impacted stream segment.

1. Is the identified stream a natural stream or a stream modified by human activity? (*e.g. channelized*)
☐ Yes ☐ No If yes, describe modification: _____
2. Is there an apparent sediment problem in the streambed of the impaired or impacted stream segment?
☐ Yes ☐ No (If no, please continue to question #5.)
3. If yes, is the excessive sedimentation coming from:
☐ Streambanks
☐ Adjacent land area
☐ Other sources within the watershed upstream of the identified stream segment
☐ A tributary feeding into the identified stream segment (list name of the tributary) _____
4. Are there any current in-stream projects on the identified stream segment or upstream of the identified segment that are contributing sediment to the identified stream segment?
☐ Yes ☐ No If yes, what type of project is it and are the stream disturbing effects from the projects temporary or long term?

5. Additional information (add any information here that helps describe the current water quality problems within the identified stream segment).

PART II: Watershed Area - This area includes land beginning at the top of the streambank along the entire length of the identified Impaired or Impacted stream segment and extending away from the stream to the watershed boundary.

1. Are there sources of excessive sediment and/or pollution delivery into the identified stream segment from the watershed area? ☐ Yes ☐ No
2. If yes, what are the sources? (check all that apply)
☐ Cropland
☐ Pasture/Hayland
☐ Forestland
☐ Road construction
☐ Construction other than road
☐ Mining
☐ Tributary stream (include name) _____
☐ Other (list source) _____

3. Check the items listed below if they appear in this stream:

- ☐ Channelization
- ☐ Livestock access
- ☐ Pesticide mixing stations
- ☐ Outfall pipes and sources (stormwater, septic systems, unknown, etc.)
- ☐ Permitted discharges
- ☐ Development
- ☐ Road crossings
- ☐ Trout farms
- ☐ Periods of no flow
- ☐ Swamp drainage
- ☐ Other (list items) _____

4. Estimate the percentage of stream miles in the watershed that are buffered: _____%

Estimate of average buffer width (feet): _____ feet

What is the typical buffer vegetation (grass, shrubs, trees, etc.): _____

5. Describe land use changes in the watershed over the past 5-10 years:

6. If possible, described the extent of existing BMPs in the watershed area (within the past 10 years):

Name of BMP (e.g. livestock exclusion,
stormwater retention, streamside buffers, etc)

**Est. Units/
Amount**
(e.g. 28 units)

Funding Source
(e.g. ACSP, EQIP, 319,
EEP)

Cost (\$)

Name of BMP (e.g. livestock exclusion, stormwater retention, streamside buffers, etc)	Est. Units/ Amount (e.g. 28 units)	Funding Source (e.g. ACSP, EQIP, 319, EEP)	Cost (\$)

PART III: Actions Needed to Address Problems

1. Recommended Actions to Address Identified Problems: *(e.g. riparian buffer rehabilitation; livestock exclusion; agrichemical handling facility; landowner education/outreach; stormwater retention pond, etc)*

2. Potential barriers or limiting factors to solving identified problems:

The following two questions are primarily aimed at resource professionals familiar with the costs of Best Management Practice.

3. Resources (other than cost share) needed to solve identified problems (show resources for staff, equipment):

Item	Units/ Amount Needed	Estimated Cost (\$)

4. Estimate the extent of BMPs needed on this stream segment (please list in order of priority):

Name of BMP <i>(e.g. livestock exclusion)</i>	Quantity Needed <i>(acres, feet, units, etc.)</i>	Estimated Cost (\$)

PART IV: – Estimates of land uses in the watershed.

1. Major Land Uses in the Watershed (check all that apply)

	Streamside (up to 50')	Within 1000' of stream	Within Watershed
Residential:			
Single-family housing	☐	☐	☐
Apartment/Condo Buildings	☐	☐	☐
Lawn/Gardens	☐	☐	☐
Parking Lot	☐	☐	☐
Other: _____	☐	☐	☐
Commercial / Industrial / Institutional:			
Commercial (stores, restaurants, etc.)	☐	☐	☐
Auto repair/gas station	☐	☐	☐
Industrial	☐	☐	☐
Sewage treatment facility	☐	☐	☐
Sewage treatment lines/manholes	☐	☐	☐
Institutions (schools, offices)	☐	☐	☐
Landfill	☐	☐	☐
Junkyard	☐	☐	☐
Other: _____	☐	☐	☐
Forest / Park / Greenway:			
National/State Forest	☐	☐	☐
Recreational Facility	☐	☐	☐
Woods/Greenway	☐	☐	☐
Golf Courses	☐	☐	☐
Vegetative strips/buffers	☐	☐	☐
Other: _____	☐	☐	☐
Agriculture / Rural:			
Grazing land	☐	☐	☐
Cropland	☐	☐	☐
Animal feedlot	☐	☐	☐
Isolated farm	☐	☐	☐
Fallow field	☐	☐	☐
Fish hatchery	☐	☐	☐
Tree farm	☐	☐	☐
Other: _____	☐	☐	☐

2. Summary of major land uses in the watershed (use approximate percentage)

Residential: _____%
 Commercial/Industrial: _____%
 Forest/Parkway/Greenway: _____%
 Agriculture/Rural: _____%
 Other: _____%

3. Major Land Use Activities in the Watershed (check all that apply)

	Streamside (up to 50')	Within 1000' of stream	Within Watershed
Construction:			
Building (residential)	☐	☐	☐
Building (commercial)	☐	☐	☐
Roadway	☐	☐	☐
Bridge	☐	☐	☐
Other: _____	☐	☐	☐
Logging			
Selective logging	☐	☐	☐
Intensive logging	☐	☐	☐
Other: _____	☐	☐	☐
Mining			
Instream mining	☐	☐	☐
Strip mining	☐	☐	☐
Pit mining	☐	☐	☐
Abandoned mine	☐	☐	☐
Quarry	☐	☐	☐
Other: _____	☐	☐	☐
Recreation			
Municipal/private recreation fields	☐	☐	☐
Bicycling trails	☐	☐	☐
Off-road vehicle trails	☐	☐	☐
Boat ramp	☐	☐	☐
Jogging/hiking trails	☐	☐	☐
Swimming area	☐	☐	☐
Fishing area	☐	☐	☐
Picnic area	☐	☐	☐
Golf course	☐	☐	☐
Campground/trailer park	☐	☐	☐
Power boating/jet skis	☐	☐	☐
Other: _____	☐	☐	☐

4. Comments on land uses (Use this space to expand on land use descriptions identified above. For example, you might identify specific buildings, locations of construction sites, note the streamside conditions, presence of cattle instream, note any corrective actions taken, etc.)

5. Pipe and Drainage Ditch Inventory

This information applies to a: ☐ Pipe ☐ Drainage Ditch ☐ Other: _____

Describe the discharge flow from the pipe or ditch (if any):

Rate of flow: ☐ None ☐ Steady ☐ Intermittent ☐ Heavy ☐ Trickle

Appearance: ☐ Clear ☐ Foamy ☐ Turbid ☐ Oily sheen ☐ Colored

Odor: ☐ None ☐ Chlorine ☐ Rotten egg ☐ Sewage ☐ Other: _____

6. Comments on pipe or drainage ditch observations (Use this space to identify specific facilities, or provide additional information on the drainage or stream condition noted above.)

Thank you for completing this survey! *These recommendations can be used to develop remediation proposals for the Section 319 or 205J, Ag Cost-Share Program, Clean Water Management Trust Fund, and other grant sources. Survey results will also help the DWQ's Basinwide Planning Program in developing basinwide plans and to assist you in developing watershed plans for your watershed of interest.*

Please send surveys either electronically to jeff.manning@ncdenr.gov or a hard copy to the address listed below. If you have any questions about your river basin, call 919-807-6415 or visit <http://portal.ncdenr.org/web/wq/ps/bpu>.

Basin Planner
DENR- Division of Water Quality
1617 MSC, Raleigh, NC 27699-1617

Please attach digital photos, aerial photos, GIS maps and/or any additional information that you would like to provide about this stream and its watershed.