

Monitoring Data Record

Project Title: Talecris access road project COE Action ID: 201000775
 Stream Name: UT Neuse River (Talecris Site) DWQ Number: 20100310
 City, County and other Location Information: Turn onto Talecris access road off of Powhatan Road in Clayton, NC.
 Date Construction Completed: February 2011 Monitoring Year: (2) of 3
 Ecoregion: _____ 8 digit HUC unit 03020201
 USGS Quad Name and Coordinates: NC-Powhatan N 35.62287, W 78.41307

Rosgen Classification: _____

Length of Project: 1,160 feet Urban or Rural: Rural Watershed Size: _____
 Monitoring DATA collected by: J. Young and M. Green Date: 6/25/13

Applicant Information:

Name: NCDOT Roadside Environmental Unit
 Address: 1425 Rock Quarry Road Raleigh, NC 27610
 Telephone Number: (919) 861-3772 Email address: mlgreen@ncdot.gov

Consultant Information:

Name: _____
 Address: _____
 Telephone Number: _____ Email address: _____

Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level 1

Mitigation Plan states: The site will be visually monitored and documented with photo points for channel stability and vegetation survival for three years. The conservation easement will be held in perpetuity and recorded on the Talecris deed. The mitigation site and conservation easement boundary will also be placed on the Natural Environment Unit's Mitigation Geodatabase for long term stewardship.

Permit states: The permittee shall monitor the buffer mitigation site. Monitoring shall consist of visual review with photo points for channel stability and vegetation survival. An annual report shall be submitted to NCDWQ for a period of 3 years showing monitoring results, survival rate/ success of tree and vegetation establishment, and that diffuse flow through the riparian buffer has been maintained. The first annual report shall be submitted within one year of final planting. Failure to achieve a buffer density of 320 trees per acre after 3 years will require the annual report to provide appropriate remedial actions to be implemented and a schedule for implementation. Approval of the final annual report and a formal "close out" of the mitigation site by NCDWQ is required.

Section 1. PHOTO REFERENCE SITES

(Monitoring at all levels must complete this section)

Total number of reference photo locations at this site: 4 photo point locations with 2 photos taken from each location. Additional overview photo.

Dates reference photos have been taken at this site: 6/27/12, 6/25/13

Individual from whom additional photos can be obtained (name, address, phone): _____

Other Information relative to site photo reference: A site map is included with this report showing the photo point locations.

Section 2. PLANT SURVIVAL

Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Estimated causes, and proposed/required remedial action: _____

ADDITIONAL COMMENTS: NCDOT completed planting this site in February 2011 with silky dogwood, buttonbush, sycamore, green ash, swamp chestnut oak, and water tupelo. Two 50 x 50 foot vegetation plots were set in the planted area. Plant survival counts were conducted during June 2013 monitoring evaluation with the results showing an average density of 536 trees per acre, which is well above the minimum success criteria of 320 trees per acre after the second year of monitoring. The herbaceous vegetation was very thick throughout the site. Other species noted on site included sedge, fennel, tear-thumb, Juncus sp., black willow, jewelweed, alder, cutgrass, briars, and various grasses. NCDOT proposes to continue plant survival monitoring at this site.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Plot #	Silky Dogwood	Buttonbush	Sycamore	Green Ash	Swamp Chestnut Oak	Water Tupelo	Total (Year 2)	Total (at planting)	Density (Trees/Acre)
1	6	8	8	8	6		36	40	612
2	12	6	6	2	1		27	40	459
Average Density (Trees/Acre)									536

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

UT to Neuse River (Talecris Site) is stable for the Year 2 monitoring evaluation. A headcut that was noted previously approximately 12 feet upstream of Photo Point #4 remains stable at this time. There was no flow in the channel next to Photo Point #4, instead, the flow was in another channel north of this location. This channel remains stable and highly vegetated. A bankfull event had recently occurred. NCDOT will continue to monitor channel stability at the UT to Neuse River.

Date Inspected 6/25/13	12 feet upstream of PP #4	Station Number	Station Number	Station Number	Station Number
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?	Headcut has formed upstream of PP#4				
Bank or scour erosion present?					
Other problems noted?					

Section 4. DEBIT LEDGER

Site name	Site TIP	HUC	River Basin	Division	County	Mitigation Type	Notes	As Built Quantity	Available	Debit
UT to Neuse River (Talecris Site)	N/A	3020201	Neuse	4	Johnston					WBS No. 59002
						Stream Enhancement		1,160 lf.	1,160 lf.	
						Buffer Enhancement		75,000 ft ²	72,897 ft ²	2,103 ft ²
						Non-Riverine Wetland		1.0 acre	1.0 acre	

***Note: Debit Ledger information up to date as of September 13, 2013.**

UT to Neuse River

(Talecris Site)



PP #1 (Upstream)



PP #1 (Downstream)



PP #2 (Upstream)



PP #2 (Downstream)



PP #3 (Upstream)
June 2013



PP #3 (Downstream)

UT to Neuse River

(Talecris Site)



PP #4 (Upstream)



PP #4 (Downstream)



Overview Photo

June 2013

Figure 2: Talecris Mitigation Site

