

OFFICE ESTIMATE
2 @ 10 x 8 RBC

PREDESIGN-PRESURVEY REPORT

Project# 17BP.11.R.98
TIP# _____
Let Date _____
WBS# _____

County WILKES (DIV. 11)

Bridge# 960151
Road# SR 1728 (LONG BOTTOM RD)
Stream (DUNGEON CREEK) MULBERRY CREEK
ESM

Type Of Request: POC Force Account TIP NCMA

Date 4/15/14 Name MJY

Assigned To RCH

Checked By 4/21/14 wsh

Prior Survey Date NONE (attach copy of prior survey) BRN BK: NO CD. FILE NO

Study By Scour Section NO

Flood Zone X Detail Study NONE Date 3/2/09 Panel# 3944

B.M. Info N/A

Quad Map MCGRADY Drainage Area 1.56 SQ. MI. From STREAM STATS
Q25 550 cfs Q50 650 cfs Q100 800 cfs Method REG. EQNS.
REGION 2/RURAL

EXISTING BRIDGE INFORMATION

Location 1.2 MI. NE. JCT. NC 18 LONG: 81.22318 LAT: 36.34847

Average Daily Traffic 320 (2010) 6% TRK.

Length 26' Bed- To Crown 6' Water Depth 1'

Type Structure TIM. FLOOR ON I-BEAMS, TIM. CAPS/POST & SILLS.

Type Spans 1 @ 26'-2"

Upstream Structure 960150 (TIM. FLOOR ON I-BEAMS, TIM. CAPS/POST & SILLS, 27' long; 1 @ 26'-7")

Location 1.3 MI. NE. JCT. NC 18

Bed- To Crown 5' (D=1') Prior Survey _____

Downstream Structure 960290 (STEEL PLANK FLOOR ON I-BEAMS, REIN. CONCL. ABUT., 32' long; 1 @ 32')

Location 1.1 MI. NE. JCT. NC 18 (On

Bed- To Crown 7' (D=1') Prior Survey _____

SCS Watershed N/A

✓ ENVIRONMENTAL TVA NO

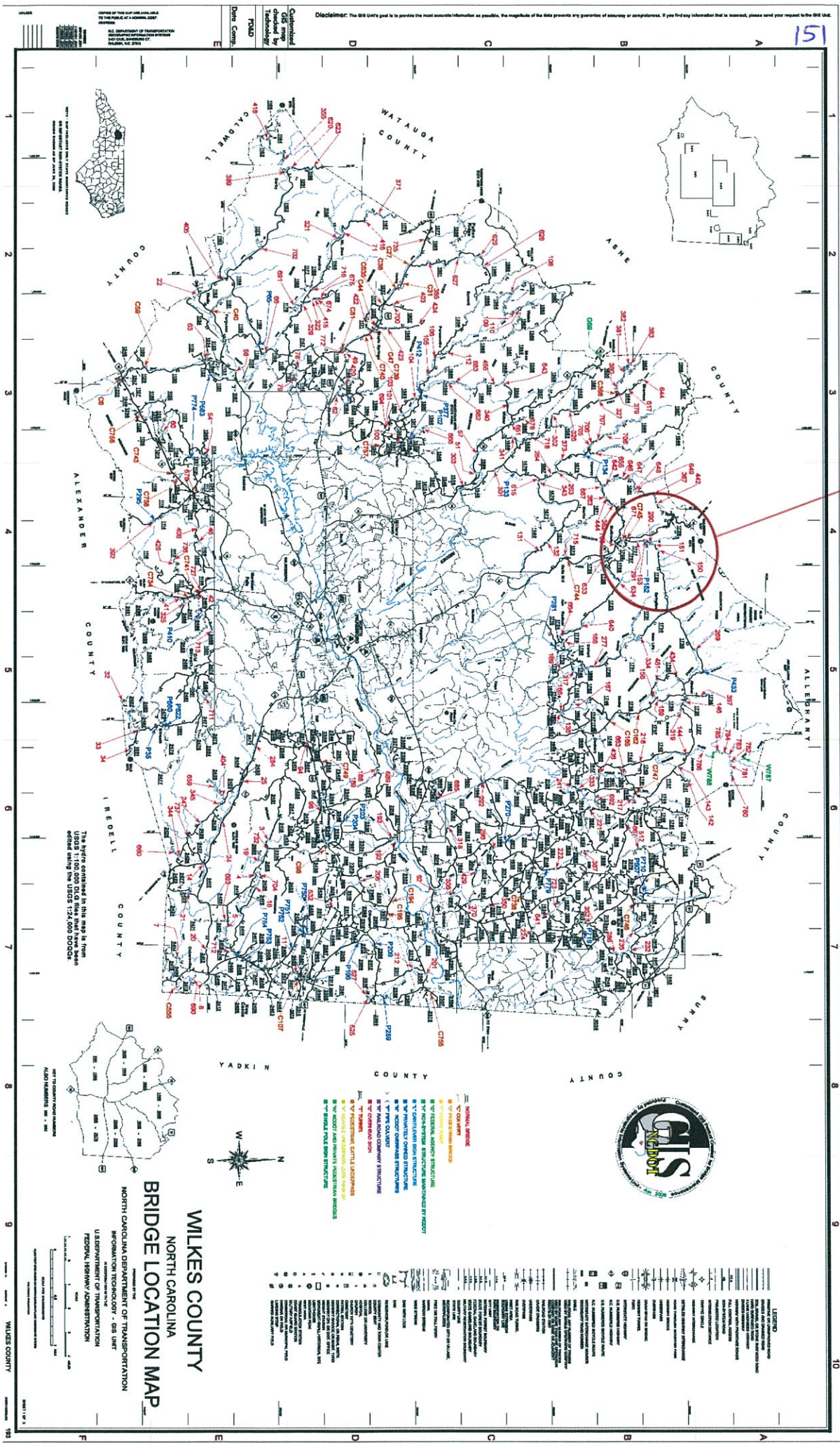
Trout Stream YES (WILD) Anadromous Fish NO Primary Nursery Area NO

High Quality Waters NO Nutrient Sensitive Waters NO

Near Water Supply Intake NO CAMA County NO

Stream Classification C # 12-42-1-1

DENR River Basin Info. YADKIN



151

1,320,000

1,360,000

ALLEGHANY

AIR BELLOWS GAP

Thurmond Graham Game Land

STONE MOUNTAIN STATE PARK

P433

397

146

785

784

783

782

UNIT Y

N

442

367

649

648

647

646

655

642

644

617

379

327

708

707

706

705

326

373

302

1561

1443

1562

1563

1564

1567

TO GARRETT

MULBERRY GAP

MULBERRY MTN.

BLUE RIDGE MOUNTAINS

DOUGHTON PARK

BLUE RIDGE PARKWAY RECREATIONAL AREA

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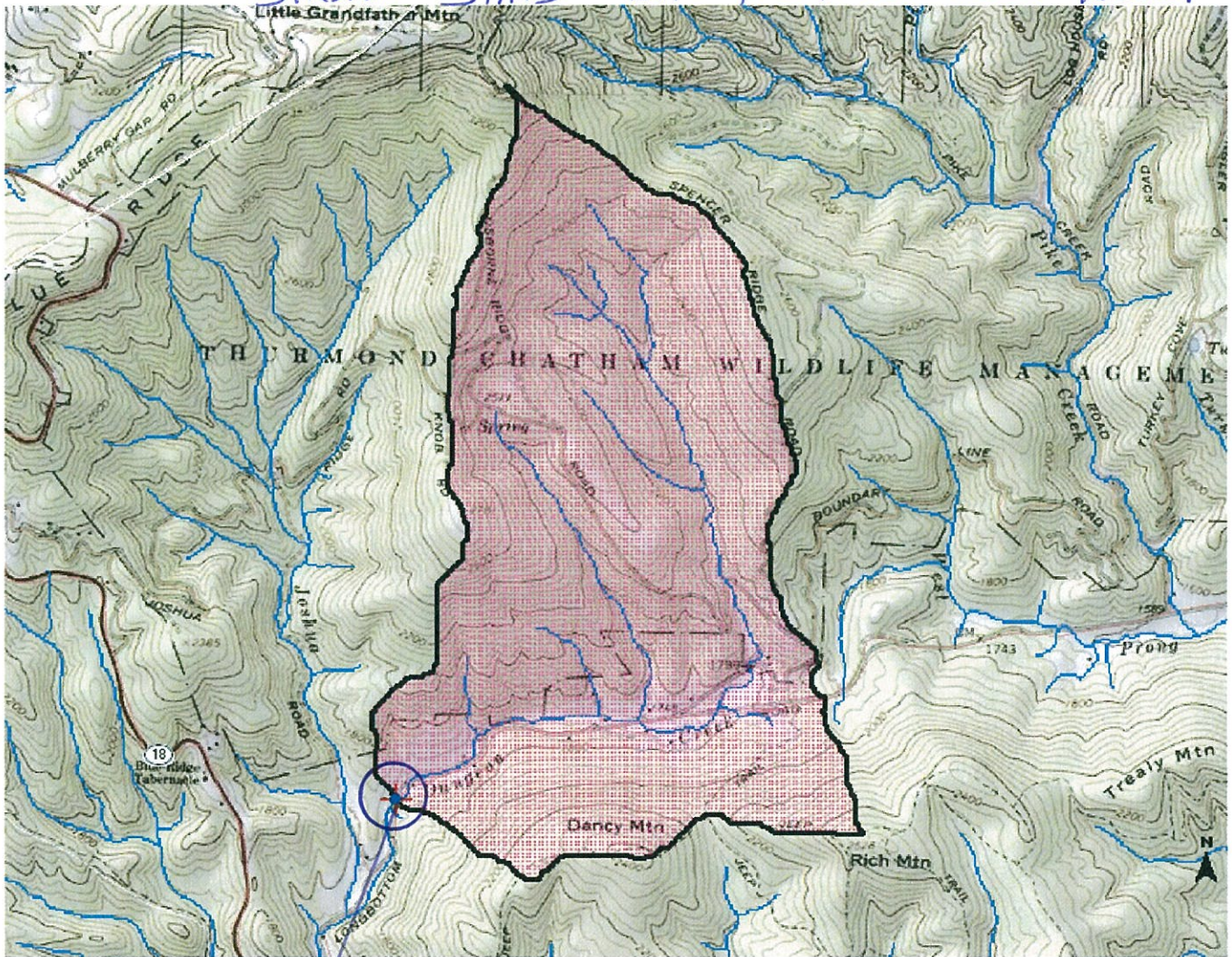
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STREAM STATS DA = 1.56 SQ MILES 960151



0.5 0.25 0 0.5 Miles

#151

960151



North Carolina StreamStats

Streamstats Ungaged Site Report

Date: Tue Apr 15 2014 07:53:41 Mountain Daylight Time

Site Location: North_Carolina

NAD27 Latitude: 36.3484 (36 20 54)

NAD27 Longitude: -81.2233 (-81 13 24)

NAD83 Latitude: 36.3485 (36 20 55)

NAD83 Longitude: -81.2231 (-81 13 23)

Drainage Area: 1.56 mi²

Percent Urban: 5.8 %

Percent Impervious: 0.2 %

Peak Flows Region Grid Basin Characteristics			
100% Peak Southeast US 2009 5158 (1.56 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	1.56	1	9000
Percent Area in Region 1 (percent)	0.000	0	100
Percent Area in Region 2 (percent)	100.000	0	100
Percent Area in Region 3 (percent)	0.000	0	100
Percent Area in Region 4 (percent)	0.000	0	100
Percent Area in Region 5 (percent)	0.000	0	100

Urban Flows Region Grid Basin Characteristics			
100% Peak urban Blue Ridge-Piedmont FS007-00 (1.56 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	1.56	0.04	41
Area of Impervious Surfaces (percent)	0.23 (below min value 2)	2	54.6

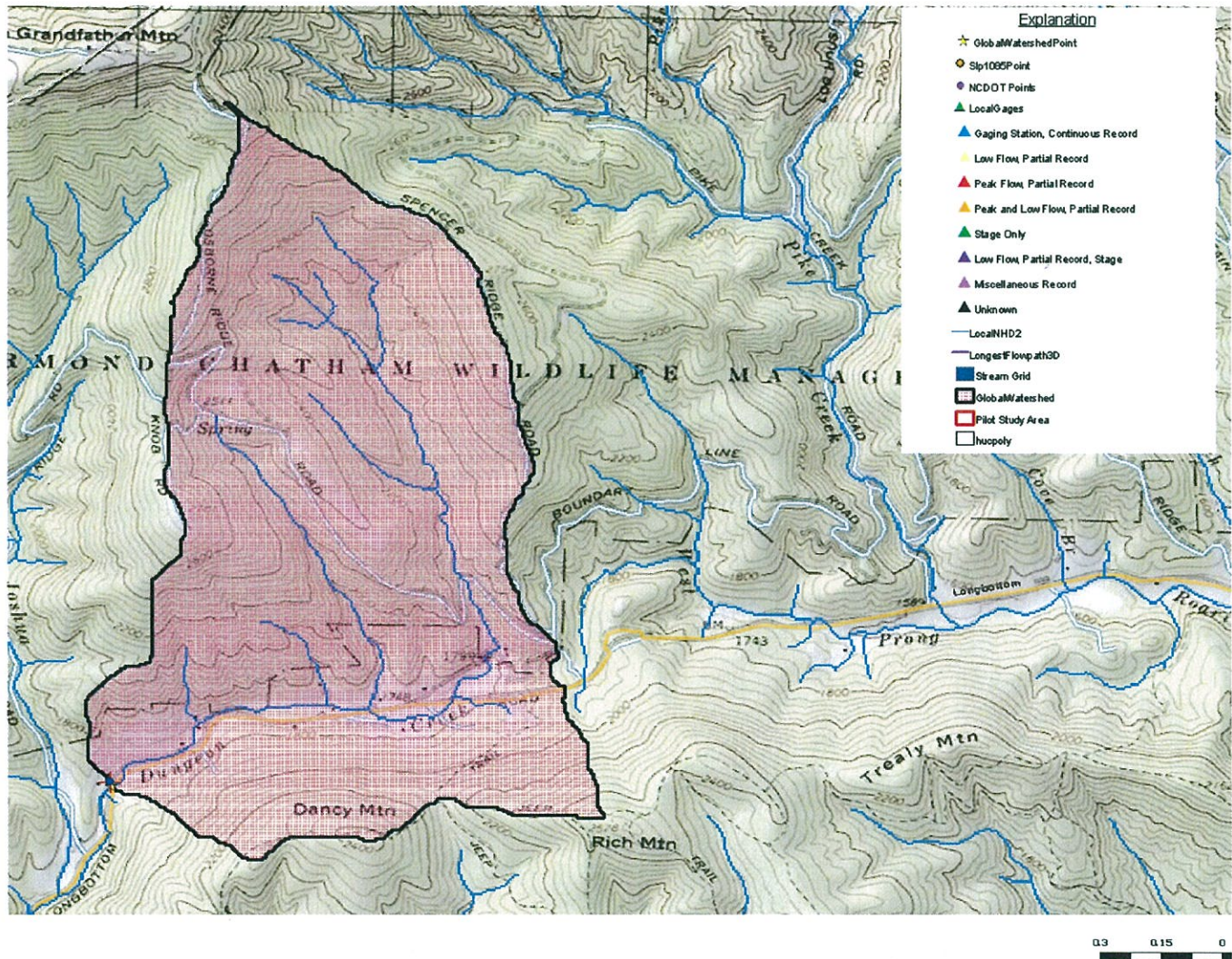
Warning: Some parameters are outside the suggested range. Estimates will be extrapolations with unknown errors.

Peak Flows Region Grid Streamflow Statistics					
Statistic	Flow (ft ³ /s)	Prediction Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
				Minimum	Maximum
PK2	155	35		87.9	273
PK5	292	34		166	511
PK10	400	35		224	715
PK25	549	38		296	1020
PK50	659	40		343	1260
PK100	790	42		397	1570
PK200	906	44		439	1870
PK500	1090	48		500	2360

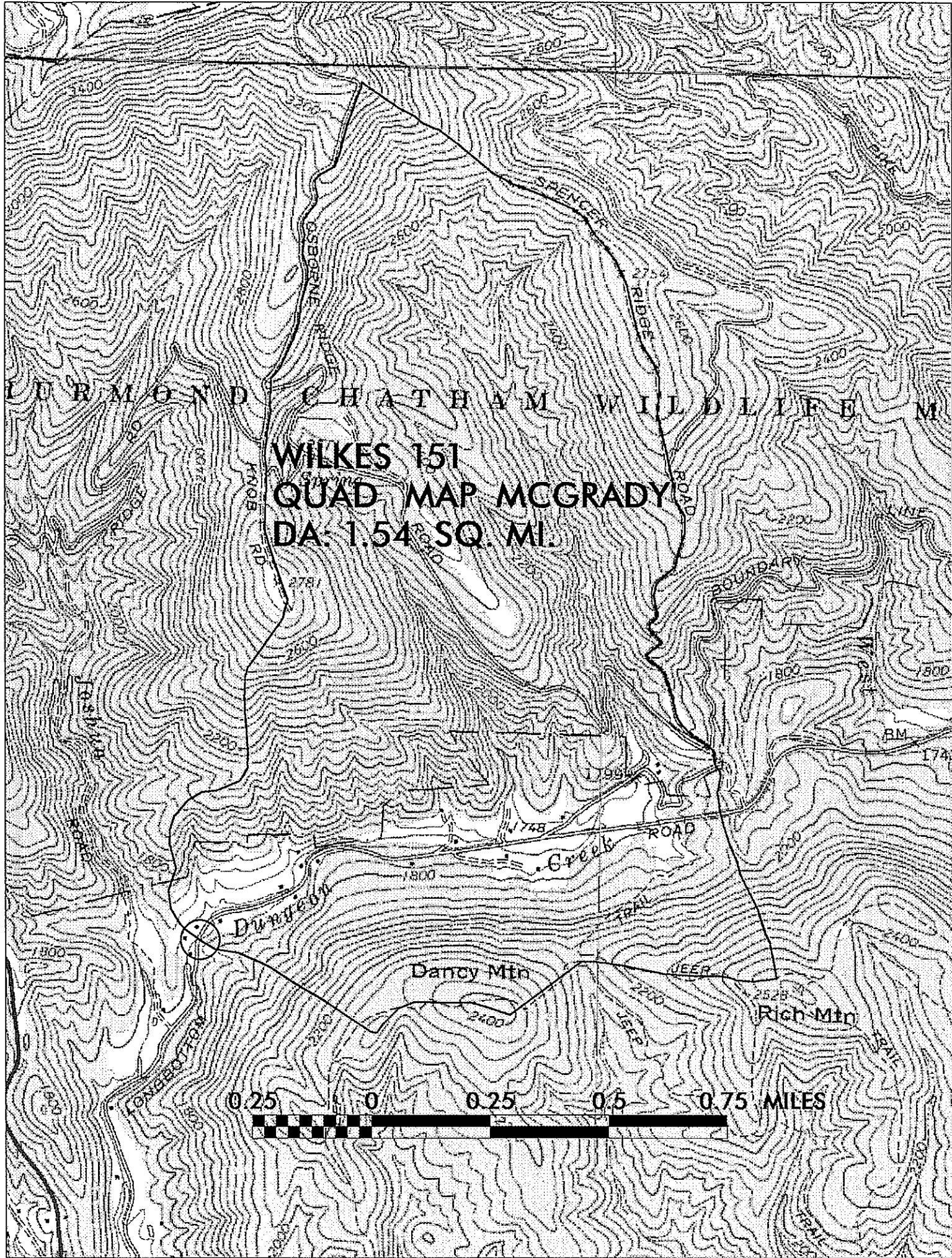
Urban Flows Region Grid Streamflow Statistics					
Statistic	Flow (ft ³ /s)	Standard Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
				Minimum	Maximum
PK2U	16.9				
PK5U	46.1				
PK10U	76.6				
PK25U	158				
PK50U	216				
PK100U	288				

960151 WILKES CO.

DA= 1.6 SQ MILES



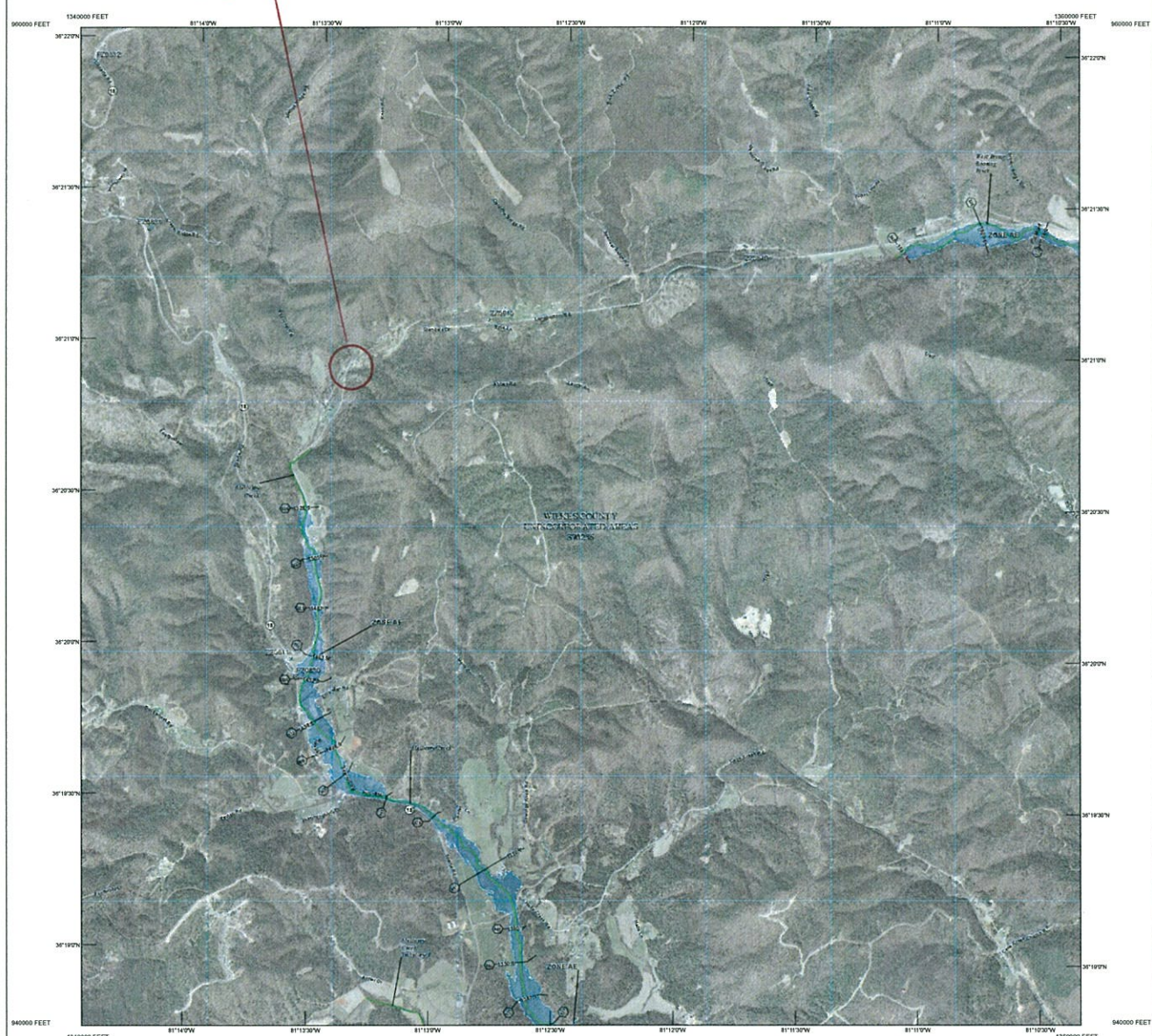
4/21/2014 10:54:59 AM



WILKES 151
QUAD MAP MCGRADY
DA: 1.54 SQ. MI.

0.25 0 0.25 0.5 0.75 MILES

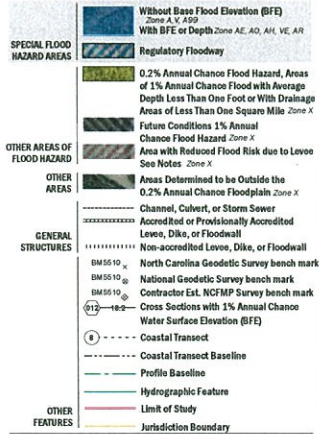
SITE



This digital Flood Insurance Rate Map (FIRM) was produced through a unique cooperative partnership between the State of North Carolina and the Federal Emergency Management Agency (FEMA). The State of North Carolina has implemented a long-term approach to floodplain management to decrease the risks associated with flooding. This is demonstrated by the State's commitment to map flood hazard areas at the local level. As a part of this effort, the State of North Carolina has joined in a Cooperative Technical State Agreement with FEMA to produce and maintain the digital FIRM.

FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR ZONE DESCRIPTIONS AND INDEX MAP
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING
DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT
[HTTP://FRIS.NC.GOV/FRIS](http://FRIS.NC.GOV/FRIS)



NOTES TO USERS

For information and questions about this map, available products associated with the FIRM including future versions of this FIRM, how to order products or the National Flood Insurance Program's general information, please visit the FEMA Map Information Center at <http://www.fema.gov> or call 1-877-FEMA-8000. For more information on the FIRM, please visit the FEMA Map Information Center at <http://www.fema.gov> or call 1-877-FEMA-8000. For more information on the FIRM, please visit the FEMA Map Information Center at <http://www.fema.gov> or call 1-877-FEMA-8000.

Communities desiring to be included in the FIRM must obtain a current copy of the adjacent panel as well as the current FIRM data. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map data refer to the Flood Insurance Study report for this jurisdiction.

Base map information shown on this FIRM was provided in digital format by the North Carolina Floodplain Mapping Program (NCFMP). The source of the information can be determined from the metadata available in the digital FIRM database and in the Technical Support Data Network (TSN).

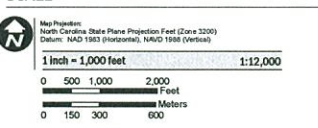
ACCREDITED LEVEE NOTES TO USERS: If a community has a levee system, it is the responsibility of the community to provide the necessary data and documentation of the data and documentation provided to FEMA. The community must provide the necessary data and documentation of the data and documentation provided to FEMA. The community must provide the necessary data and documentation of the data and documentation provided to FEMA.

PROVISIONALLY ACCREDITED LEVEE NOTES TO USERS: If a community has a levee system, it is the responsibility of the community to provide the necessary data and documentation of the data and documentation provided to FEMA. The community must provide the necessary data and documentation of the data and documentation provided to FEMA.

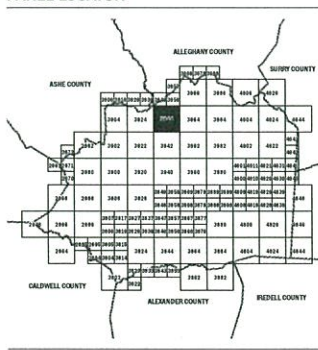
LIMIT OF MODERATE WAVE ACTION NOTES TO USERS: For some coastal flooding zones the AE Zone category has been divided by a Limit of Moderate Wave Action (LMWA). The LMWA represents the approximate landward limit of the 1.5-foot limiting wave. The effects of wave hazards between the VE Zone and the LMWA or between the LMWA and the AE Zone are not identified; they will be similar to, but less severe than those in the VE Zone.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) NOTE: This map may include approximate boundaries of the CBRS for informational purposes only. Flood insurance is not provided for areas within the CBRS that are not within a flood hazard area. For more information on the CBRS, please visit the FEMA Map Information Center at <http://www.fema.gov> or call 1-877-FEMA-8000.

SCALE



PANEL LOCATOR



National Flood Insurance Program

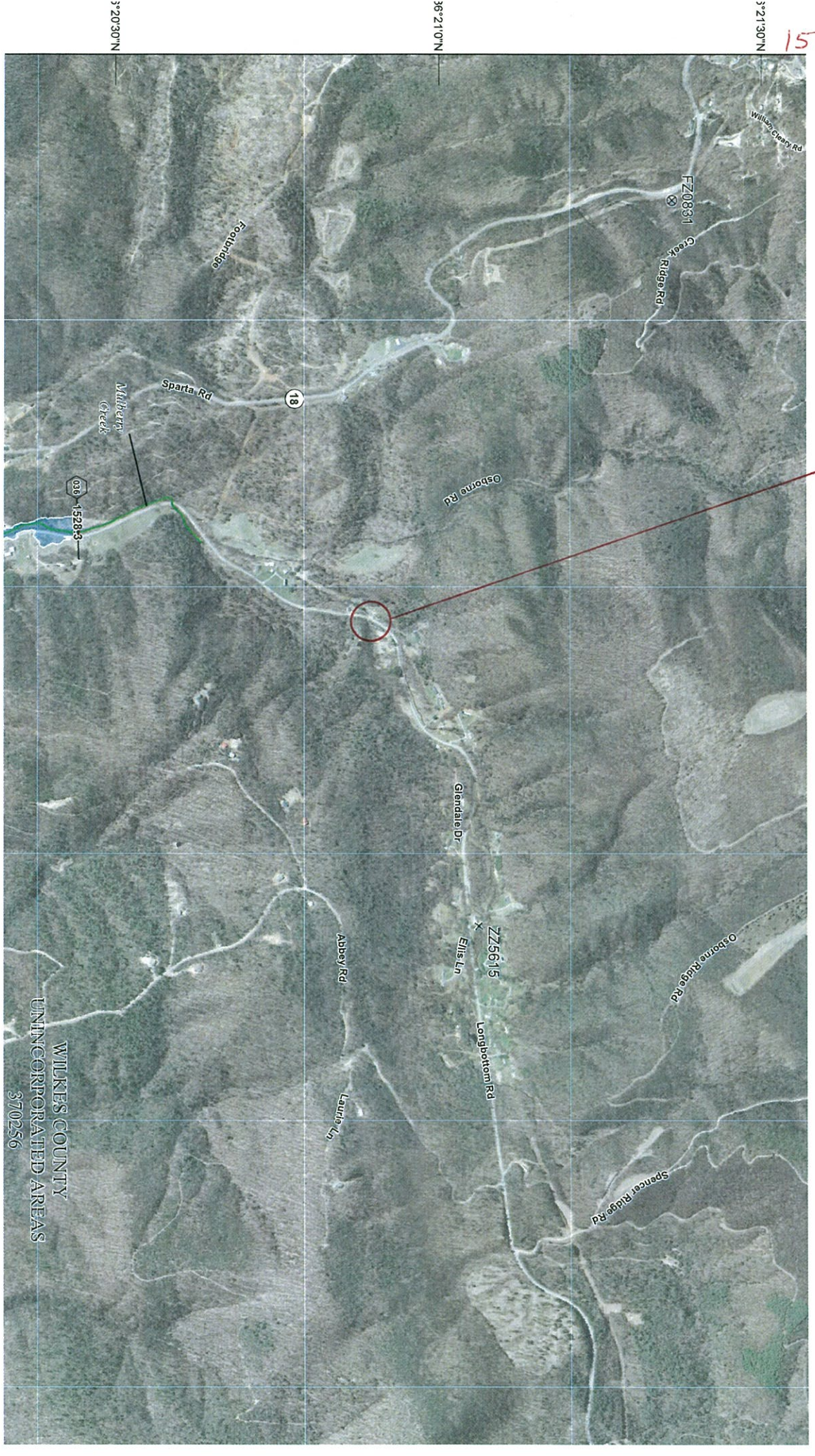
NORTH CAROLINA FLOODPLAIN MAPPING PROGRAM
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP
NORTH CAROLINA
PANEL 3944

Panel Contains:
COMMUNITY: WILKES COUNTY
CID: 39256
PANEL SUFFIX: 3944

MAP NUMBER: 3710394-400J
MAP REVISED: 3/2/2009

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SITE



32130°N

36210°N

32030°N



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

PRIORITY MAINTENANCE
TEMPORARY REPAIRS

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection - Contract

COUNTY WILKES BRIDGE NUMBER 960151 INSPECTION CYCLE 0 YRS
ROUTE SR1728 ACROSS MULBERRY CREEK M.P. 0

LOCATION 1.2 MI.NE.JCT.NC18

SUPERSTRUCTURE TIMBER FLOOR ON I-BEAMS

SUBSTRUCTURE E.BTS:TIMBER CAPS/TIMBER POST & SILLS @ VAR.CTS.

SPANS 1 @ 26'-2

LONGITUDE 81° 13' 23.44"

LATITUDE 36° 20' 54.48"

INSPECTION DATE 12/03/2012

PRESENT CONDITION FAIR

PRESENT POSTING Y SV 15 TTST 20 PROPOSED POSTING _____

OTHER SIGNS PRESENT (4) DELINEATORS



WEST APPROACH LOOKING EAST

SIGN NOTICE
ISSUED FOR

NUMBERED
REQUIRED

No WEIGHT LIMIT _____
No DELINEATORS _____
No NARROW BRIDGE _____
No ONE LANE BRIDGE _____
No LOW CLEARANCE _____

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BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 02/06/2013

COUNTY : WILKES DIVISION : 11 DISTRICT : 3 STRUCTURE NUMBER : 960151 LENGTH : 26 FEET

ROUTE CARRIED : SR1728 FEATURE INTERSECTED : MULBERRY CREEK

LOCATED : 1.2 MI.NE.JCT.NC18 BRIDGE NAME : CITY :

FUNC. CLASS : 09 SYST.ON : NFA SYST.UNDER : NFA ADT & YR : 320 2010 RAIL TYPE : LT 227 RT 227

BUILT : 1966 BY : BMU PROJ : FED.AID PROJ : DESIGN LOAD : Unknown

REHAB : BY : PROJ : ALIGNMENT : TAN SKEW : 135 LANES : ON 2 UNDER 0

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 6 FT WATER DEPTH : 1 FT

SUPERSTRUCTURE : TIMBER FLOOR ON I-BEAMS

SUBSTRUCTURE : E.BTS:TIMBER CAPS/TIMBER POST & SILLS @ VAR.CTS.

SPANS : 1 @ 26'-2

BEAMS OR GIRDERS : 11 LINES 12 I-BEAMS @ 2'-3.5 CENTERS

FLOOR : 4X8 TIM/5 AWS ENCROACHMENT : DECK (OUT TO OUT) : 25 FT

CLEAR ROADWAY : 24.167 FT BETWEEN RAILS : 24.833 FT SIDEWALK OR CURB : LT .3 FT RT .3 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-1 OPE.RTG. : HS-1 CONTR.MEMBER : int bm POSTED : SV 15 TTST 20 DATE 05/07/2009

SYSTEM : Secondary S.R. Route GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

REMARKS :

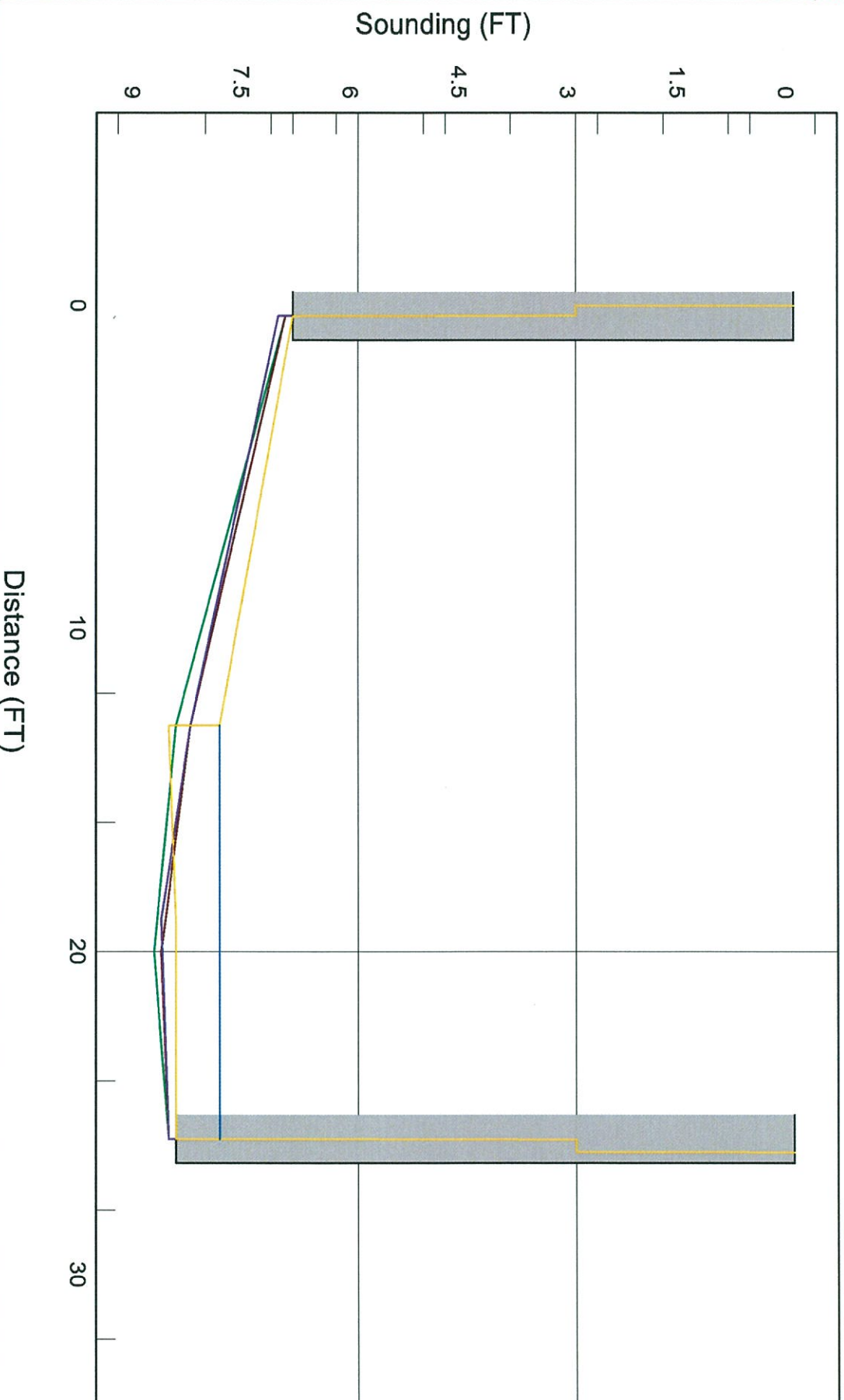
Bridge: 960151

County: WILKES

Date: 12/03/2012

Top of Rail = 0 FT (Sounding)

STREAMBED PROFILE (Downstream)





SOUTH ELEVATION



NORTH ELEVATION