

FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 2 OF 4



RUTHERFORD COUNTY, TENNESSEE

AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
EAGLEVILLE, CITY OF	470166
LA VERGNE, CITY OF	470167
MURFREESBORO, CITY OF	470168
RUTHERFORD COUNTY, UNINCORPORATED AREAS	470165
SMYRNA, TOWN OF	470169



FEMA

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Exhibit 1

Flood Profiles	<u>Panel</u>
Armstrong Branch	01 P
Bear Branch	02-03 P
Bradley Creek	04-08 P
Bradley Creek Tributary 1	09 P
Bushman Creek	10-11 P
East Branch Hurricane Creek	12-14 P
East Fork Stones River	15-22 P
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Finch Branch	25-27 P
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Volume 4
Exhibit 1

Flood Profiles	<u>Panel</u>
Middle Fork Stones River	47-55 P
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Overall Creek	60-64 P
Puckett Creek	65-69 P
Rock Spring Branch	70-74 P
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Unnamed Tributary to Lees Spring Creek	83 P
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Wades Branch	87 P
West Fork Stones River	88-94 P

Published Separately

Flood Insurance Rate Map (FIRM)

Table 13: Roughness Coefficients

Flooding Source	Channel “n”	Overbank “n”
Andrews Creek	0.050	0.100-0.150
Armstrong Branch	0.035-0.040	0.080
Armstrong Branch	0.040-0.050	0.100-0.150
Bear Branch	0.045	0.050
Bear Branch	0.045	0.050
Big Springs Creek	0.050	0.100-0.150
Bradley Creek	0.045	0.080
Bradley Creek	0.040-0.050	0.100-0.150
Bradley Creek Tributary 1	0.040-0.055	0.060-0.120
Bushman Creek	0.025-0.065	0.085-0.120
Bushman Creek	0.040-0.045	0.100-0.130
Cheatham Branch	0.040-0.045	0.100-0.150
Christmas Creek	0.040-0.050	0.100-0.150
Concord Branch	0.040-0.055	0.100-0.150
Cripple Creek	0.050	0.100-0.150
Dry Branch	0.050	0.120
Dry Creek	0.050	0.100-0.150
Dry Fork	0.040-0.045	0.100-0.150
Dry Fork Creek	0.040-0.045	0.100-0.150
East Branch Hurricane Creek	0.040-0.050	0.075-0.080
East Branch Hurricane Creek	0.040-0.050	0.075-0.080
East Branch Hurricane Creek	0.065	0.110
East Branch Hurricane Creek	N/A	N/A
East Fork Stones River	0.040-0.055	0.080-0.120
East Fork Stones River	0.040-0.055	0.100-0.150
East Fork Stones River	0.040-0.050	0.060-0.120
East Fork Stones River Tributary 2	0.040-0.050	0.060-0.120
Fall Creek	0.040-0.045	0.100-0.150
Fall Creek	0.040-0.045	0.100-0.150
Finch Branch	0.047	0.090
Finch Branch	0.045-0.050	0.100-0.150
Harpeth River	0.033-0.065	0.030-0.150
Harpeth River	0.040-0.050	0.100-0.150

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel "n"	Overbank "n"
Harts Branch	0.045	0.070-0.100
Henry Creek	0.050	0.100-0.150
Hurricane Creek	0.030-0.040	0.050-0.150
Hurricane Creek #2	0.040-0.050	0.100-0.150
Kelly Creek	0.045-0.055	0.100-0.150
Lees Spring Branch	0.040-0.060	0.070-0.120
Long Creek	0.040-0.050	0.110-0.150
Lytle Creek	0.045-0.050	0.030-0.100
Lytle Creek	0.030-0.060	0.090-0.110
Lytle Creek	0.040-0.050	0.110-0.150
Lytle Creek Overflow	0.030-0.050	0.030-0.100
McElroy Branch	0.050	0.150
McKnight Branch	0.040-0.050	0.110-0.150
McKnight Branch	0.040-0.050	0.070-0.120
McKnight Branch Tributary	0.040-0.055	0.060-0.120
Middle Fork Stones River	0.045	0.080
Middle Fork Stones River	0.045	0.080
Middle Fork Stones River	0.040-0.050	0.100-0.150
Murray Branch	0.050	0.150
Olive Branch	0.040-0.065	0.085-0.100
Olive Branch	0.040-0.050	0.100-0.150
Overall Creek	0.035-0.065	0.080-0.100
Overall Creek	0.035-0.065	0.080-0.100
Overall Creek	0.035-0.065	0.080-0.100
Overall Creek	0.050	0.120-0.150
Panther Creek	0.040-0.050	0.110-0.150
Puckett Creek	0.040	0.080
Puckett Creek	0.040	0.080
Puckett Creek	0.040	0.080
Puckett Creek	0.040-0.050	0.110-0.150
Reed Creek	0.040-0.050	0.110-0.150
Rock Spring Branch	0.045	0.045-0.100
Rocky Fork Creek	0.040-0.045	0.100-0.150

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel “n”	Overbank “n”
Short Creek	0.040-0.050	0.100-0.150
Sinking Creek	0.025-0.065	0.085-0.120
Stewart Creek	0.045-0.050	0.045-0.100
Stinking Creek	0.040-0.050	0.100-0.150
Unnamed Tributary 007	0.040-0.050	0.110-0.150
Unnamed Tributary 009	0.045-0.045	0.100-0.150
Unnamed Tributary 011	0.040-0.050	0.110-0.150
Unnamed Tributary 014	0.045-0.055	0.100-0.150
Unnamed Tributary 018	0.050	0.120-0.150
Unnamed Tributary 026	0.050-0.055	0.100-0.150
Unnamed Tributary 028	0.045-0.050	0.100-0.150
Unnamed Tributary 046	0.045-0.050	0.100-0.130
Unnamed Tributary 047	0.040-0.050	0.100-0.150
Unnamed Tributary 049	0.050	0.110-0.150
Unnamed Tributary 051	0.050	0.150
Unnamed Tributary 052	0.050	0.120-0.150
Unnamed Tributary 055	0.050	0.100-0.150
Unnamed Tributary 056	0.040-0.050	0.110-0.150
Unnamed Tributary 057	0.050	0.120
Unnamed Tributary 058	0.050	0.100-0.120
Unnamed Tributary 069	0.040-0.050	0.100-0.165
Unnamed Tributary 081	0.050	0.150
Unnamed Tributary 092	0.050	0.150
Unnamed Tributary 116	0.050	0.100-0.150
Unnamed Tributary 118	0.050	0.100-0.120
Unnamed Tributary 119	0.045	0.130
Unnamed Tributary 124	0.050	0.100-0.150
Unnamed Tributary 126	0.050	0.150
Unnamed Tributary 133	0.050	0.100
Unnamed Tributary 141	0.040-0.050	0.100-0.150
Unnamed Tributary 143	0.040-0.050	0.110-0.150
Unnamed Tributary 144	0.050-0.055	0.100-0.150
Unnamed Tributary 150	0.050	0.120-150

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel "n"	Overbank "n"
Unnamed Tributary 177	0.045-0.050	0.100-0.110
Unnamed Tributary 179	0.045-0.050	0.100-0.130
Unnamed Tributary 182	0.045-0.050	0.110-0.150
Unnamed Tributary 183	0.040-0.045	0.100-0.200
Unnamed Tributary 184	0.045	0.100-0.140
Unnamed Tributary 184	N/A	N/A
Unnamed Tributary 185	0.045-0.050	0.100-0.200
Unnamed Tributary to Kelly Creek	0.050	0.150
Unnamed Tributary to Lees Spring Branch	0.060	0.070-0.120
Unnamed Tributary to West Fork Stones River	0.045	0.080
Unnamed Tributary to West Fork Stones River	0.040-0.045	0.110-0.140
Wades Branch	0.055	0.060
Wades Branch	0.040-0.050	0.110-0.150
West Fork Stones River	0.040-0.050	0.080-0.090
West Fork Stones River	0.040-0.050	0.080-0.090
West Fork Stones River	0.040-0.050	0.080-0.090
West Fork Stones River	0.040-0.050	0.080-0.090
West Fork Stones River	0.040-0.050	0.080-0.090
West Fork Stones River	0.040-0.050	0.100-0.150

5.3 Coastal Analyses

This section is not applicable to this Flood Risk Project.

Table 14: Summary of Coastal Analyses

[Not Applicable to this Flood Risk Project]

5.3.1 Total Stillwater Elevations

This section is not applicable to this Flood Risk Project.

Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas

[Not Applicable to this Flood Risk Project]

Table 15: Tide Gage Analysis Specifics

[Not Applicable to this Flood Risk Project]

5.3.2 Waves

This section is not applicable to this Flood Risk Project.

5.3.3 Coastal Erosion

This section is not applicable to this Flood Risk Project.

5.3.4 Wave Hazard Analyses

This section is not applicable to this Flood Risk Project.

Table 16: Coastal Transect Parameters

[Not Applicable to this Flood Risk Project]

Figure 9: Transect Location Map

[Not Applicable to this Flood Risk Project]

5.4 Alluvial Fan Analyses

This section is not applicable to this Flood Risk Project.

Table 17: Summary of Alluvial Fan Analyses

[Not Applicable to this Flood Risk Project]

Table 18: Results of Alluvial Fan Analyses

[Not Applicable to this Flood Risk Project]

SECTION 6.0 – MAPPING METHODS

6.1 Vertical and Horizontal Control

All FIS Reports and FIRMs are referenced to a specific vertical datum. The vertical datum provides a starting point against which flood, ground, and structure elevations can be referenced and compared. Until recently, the standard vertical datum used for newly created or revised FIS Reports and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD29). With the completion of the North American Vertical Datum of 1988 (NAVD88), many FIS Reports and FIRMs are now prepared using NAVD88 as the referenced vertical datum.

Flood elevations shown in this FIS Report and on the FIRMs are referenced to NAVD88. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between NGVD29 and NAVD88 or other datum conversion, visit the National Geodetic Survey website at www.ngs.noaa.gov.

Temporary vertical monuments are often established during the preparation of a flood hazard analysis for the purpose of establishing local vertical control. Although these monuments are not shown on the FIRM, they may be found in the archived project documentation associated with the FIS Report and the FIRMs for this community. Interested individuals may contact FEMA to access these data.

To obtain current elevation, description, and/or location information for benchmarks in the area, please visit the NGS website at www.ngs.noaa.gov.

The datum conversion locations and values that were calculated for Rutherford County are provided in Table 19.

Table 19: Countywide Vertical Datum Conversion

Quadrangle Name	Quadrangle Corner	Latitude	Longitude	Conversion from NGVD29 to NAVD88 (feet)
Average Conversion from NGVD29 to NAVD88 = -0.040 feet				

Table 20: Stream-Based Vertical Datum Conversion

[Not Applicable to this Flood Risk Project]

6.2 Base Map

The FIRMs and FIS Report for this project have been produced in a digital format. The flood hazard information was converted to a Geographic Information System (GIS) format that meets FEMA's FIRM Database specifications and geographic information standards. This information is provided in a digital format so that it can be incorporated into a local GIS and be accessed more easily by the community. The FIRM Database includes most of the tabular information contained in the FIS Report in such a way that the data can be associated with pertinent spatial features. For example, the information

contained in the Floodway Data table and Flood Profiles can be linked to the cross sections that are shown on the FIRMs. Additional information about the FIRM Database and its contents can be found in FEMA's *Guidelines and Standards for Flood Risk Analysis and Mapping*, www.fema.gov/flood-maps/guidance-partners/guidelines-standards.

Base map information shown on the FIRM was derived from the sources described in Table 21.

Table 21: Base Map Sources

Data Type	Data Provider	Data Date	Data Scale	Data Description
County Boundary	State of Tennessee Department of Finance and Administration GIS Department	07/03/2012	N/A	S_Pol_Ar. County Boundary.
Digital Orthophoto	Tennessee Department of Transportation Office of Aerial Surveys	08/29/2013	N/A	Spatial information for Base_Index and raster base map orthophotography.
HUC Boundaries	U.S. Geological Survey	N/A	1:100,000	Spatial and attribute information for water features, stream gages, and HUC8s.
Political boundaries, Surface Water Features, and Transportation Features	State of Tennessee Department of Finance and Administration GIS Department	09/12/2017	N/A	Spatial and attribute information for stream centerlines (Wtr_Ln), waterbodies (Wtr_Ar), street centerlines (Trnsport_Ln), and incorporated community boundaries (Pol_Ar).
Surface Water Features	State of Tennessee Department of Finance and Administration GIS Department	10/30/2006	N/A	Spatial and attribute information for stream centerlines.
Transportation Features	Watershed IV Alliance	10/16/2008	N/A	Spatial and attribute information for railroads.

6.3 Floodplain and Floodway Delineation

The FIRM shows tints, screens, and symbols to indicate floodplains and floodways as well as the locations of selected cross sections used in the hydraulic analyses and floodway computations.

For riverine flooding sources, the mapped floodplain boundaries shown on the FIRM have been delineated using the flood elevations determined at each cross section; between cross sections, the boundaries were interpolated using the topographic elevation data described in Table 22.

In cases where the 1-percent and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-annual-chance floodplain boundary has been shown. Small areas within the floodplain boundaries may lie above the flood elevations but

cannot be shown due to limitations of the map scale and/or lack of detailed topographic data.

The floodway widths presented in this FIS Report and on the FIRM were computed for certain stream segments on the basis of equal conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. Table 2 indicates the flooding sources for which floodways have been determined. The results of the floodway computations for those flooding sources have been tabulated for selected cross sections and are shown in Table 23, "Floodway Data."

Table 22: Summary of Topographic Elevation Data used in Mapping

Community	Flooding Source	Source for Topographic Elevation Data			
		Description	Vertical Accuracy	Horizontal Accuracy	Citation
Eagleville, City of; La Vergne, City of; Murfreesboro, City of; Rutherford County, Unincorporated Areas; Smyrna, Town of	Flooding Sources studied before this FIS Report 47149CV001D	USGS quadrangle maps, scale of 1:6,000 or 1:12,000, contour interval of 2 ft.	N/A	N/A	AAS 1992
La Vergne, City of; Murfreesboro, City of; Rutherford County, Unincorporated Areas; Smyrna, Town of	Flooding Sources studied in this FIS Report 47149CV001D	Light Detection and Ranging data (LiDAR)	0.28 ft.	N/A	PSI 2011
Rutherford County, Unincorporated Areas	Harpeth River	Light Detection and Ranging data (LiDAR)	0.162 m	0.064 m at 95% confidence	Woolpert 2018

BFEs shown at cross sections on the FIRM represent the 1-percent-annual-chance water surface elevations shown on the Flood Profiles and in the Floodway Data tables in the FIS Report.

Table 23: Floodway Data

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	0.20	170	1,114	2.8	537.6	522.5 ²	523.4	0.9
B	0.38	101	524	5.9	537.6	523.8 ²	524.3	0.5
C	0.54	123	538	4.6	537.6	528.7 ²	528.9	0.2
D	0.59	118	529	4.7	537.6	529.4 ²	529.6	0.2
E	0.79	83	300	8.2	537.6	534.6 ²	534.6	0.0
F	0.99	248	763	3.2	539.4	539.4	540.2	0.8
G	1.22	122	488	5.1	542.7	542.7	543.7	1.0
H	1.25	106	674	3.7	547.1	547.1	547.1	0.0
I	1.35	158	662	3.7	547.5	547.5	547.7	0.2
J	1.44	132	540	4.6	548.3	548.3	548.9	0.6
K	1.60	100	449	5.5	550.7	550.7	551.6	0.9
L	1.79	193	776	2.8	553.4	553.4	554.3	0.9
M	1.84	95	362	6.0	553.9	553.9	554.7	0.8
N	1.89	65	290	7.5	555.3	555.3	556.2	0.9
O	1.94	65	327	6.6	557.2	557.2	558.2	1.0
P	2.07	68	287	7.6	561.6	561.6	562.4	0.8
Q	2.11	155	980	2.2	566.6	566.6	567.0	0.4
R	2.27	136	635	3.4	567.0	567.0	567.5	0.5
S	2.49	125	454	4.8	569.2	569.2	570.0	0.8
T	2.89	122	517	4.2	575.9	575.9	576.4	0.5
U	2.93	83	302	7.2	576.5	576.5	576.9	0.4
V	3.04	600	*	*	580.1	580.1	580.1	0.0

¹ Miles above the confluence with East Fork Stones River

² Elevation computed without consideration of backwater effects from the East Fork Stones River

* Data not available

TABLE 23

**FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS**

FLOODWAY DATA

FLOODING SOURCE: BEAR BRANCH

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
W	3.27	135	351	3.1	581.5	581.5	581.7	0.2
X	3.58	135	492	2.2	586.6	586.6	587.6	1.0
Y	3.62	120	402	2.7	587.4	587.4	588.2	0.8
Z	3.77	90	338	3.3	591.1	591.1	592.0	0.9
AA	3.96	80	262	4.2	596.4	596.4	596.8	0.4
AB	3.99	30	45	7.8	597.1	597.1	597.1	0.0
AC	4.05	65	177	2.0	598.9	598.9	599.3	0.4
AD	4.14	50	106	3.3	600.0	600.0	600.8	0.8
AE	4.19	135	264	1.3	601.5	601.5	602.0	0.5
AF	4.33	65	127	1.7	603.0	603.0	603.5	0.5
AG	4.36	54	64	3.5	603.9	603.9	604.0	0.1
AH	4.56	65	151	1.5	607.5	607.5	608.1	0.6
AI	4.63	65	56	3.9	609.0	609.0	609.5	0.5

¹ Miles above the confluence with East Fork Stones River

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: BEAR BRANCH

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	2,746	235	2,763	5.8	558.2	551.3 ²	551.7	0.4
B	8,554	360	3,554	4.5	560.0	560.0	561.0	1.0
C	10,454	310	3,253	4.9	563.1	563.1	563.7	0.6
D	13,834	310	2,877	5.3	567.6	567.6	566.6	1.0
E	15,840	390	3,137	4.9	571.8	571.8	572.3	0.5
F	17,213	450	2,916	5.3	574.6	574.6	575.1	0.5
G	19,536	300	2,751	5.6	579.5	579.5	580.2	0.7
H	22,915	180	1,898	6.6	583.7	583.7	584.6	0.9
I	26,400	425	2,612	4.8	592.4	592.4	593.0	0.6
J	28,354	375	2,889	4.3	596.1	596.1	597.1	1.0
K	31,680	300	2,137	5.8	602.9	602.9	603.8	0.9

¹ Feet above the confluence with East Fork Stones River

² Elevation computed without consideration of backwater effects from East Fork Stones River

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFOD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: BRADLEY CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	113	59	824	7.6	544.5	524.1 ²	525.1	1.0
B	1,392	155	1,028	6.1	544.5	528.8 ²	529.6	0.8
C	3,898	195	1,475	3.9	544.5	535.4 ²	536.1	0.7
D	6,198	180	1,274	4.6	544.5	540.7 ²	541.2	0.5
E	7,619	54	393	14.8	544.5	544.2 ²	544.3	0.1
F	9,788	350	2,474	2.3	552.6	552.6	553.6	1.0
G	11,334	255	2,038	2.8	558.8	558.8	559.0	0.2
H	12,825	97	695	8.3	561.4	561.4	562.3	0.9
I	14,217	320	1,874	3.1	567.3	567.3	568.1	0.8
J	15,471	226	1,344	4.3	570.9	570.9	571.3	0.4
K	15,880	372	2,118	2.7	572.0	572.0	572.5	0.5
L	17,213	480	3,048	1.3	581.5	581.5	581.5	0.0
M	18,971	143	677	4.2	582.3	582.3	582.8	0.5
N	19,282	199	1,054	2.7	583.1	583.1	583.9	0.8
O	20,909	310	1,542	1.9	588.9	588.9	589.9	1.0

¹ Feet above the confluence with East Fork Stones River

² Elevation computed without consideration of backwater effects from East Fork Stones River

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: BUSHMAN CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	634	626	4,780	0.7	576.7	574.8 ³	575.8	1.0
B	1,109	361	2,318	1.4	576.7	574.8 ³	575.8	1.0
C	1,531	433	2,354	1.4	576.7	574.9 ³	575.9	1.0
D	2,270	83 / 155 ²	721	4.6	576.7	575.2 ³	576.1	0.9
E	2,323	88 / 140 ²	951	3.5	577.9	577.9	578.8	0.9
F	3,274	84 / 160 ²	676	4.9	578.6	578.6	579.4	0.8
G	4,066	99 / 175 ²	796	4.1	579.7	579.7	580.2	0.5
H	4,488	85 / 175 ²	710	4.6	580.0	580.0	580.6	0.6
I	5,016	90 / 155 ²	830	4.0	580.4	580.4	581.1	0.7
J	5,069	93 / 175 ²	953	3.5	581.5	581.5	582.5	1.0
K	5,491	130 / 215 ²	1,304	2.5	581.8	581.8	582.7	0.9
L	5,755	120 / 203 ²	883	3.7	581.8	581.8	582.7	0.9
M	5,977	68	389	8.5	583.4	583.4	583.4	0.0
N	6,283	208	1,285	2.6	585.6	585.6	586.2	0.6
O	6,811	65	453	7.3	586.1	586.1	586.9	0.8
P	6,991	195	1,457	2.3	592.8	592.8	593.6	0.8
Q	7,344	75	672	4.9	593.0	593.0	593.7	0.7
R	7,360	100	1,226	2.7	598.1	598.1	598.8	0.7
S	9,346	107	409	6.6	606.6	606.6	606.6	0.0
T	10,829	52	308	8.8	615.0	615.0	615.3	0.3
U	10,840	73	455	5.9	616.7	616.7	616.8	0.1
V	11,088	194	782	2.4	617.5	617.5	617.8	0.3
W	11,637	120	497	3.8	620.2	620.2	620.8	0.6
X	13,216	180	547	3.4	628.2	628.2	628.6	0.4

¹ Feet above the confluence with Hurricane Creek

² Computed width / designated width as shown on maps

³ Elevation computed without backwater considerations from Hurricane Creek

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: EAST BRANCH HURRICANE CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	528	420	7,249	5.7	506.3	496.6 ²	497.5	0.9
B	6,970	320	5,567	7.5	506.3	499.6 ²	500.5	0.9
C	12,936	370	6,060	6.8	506.3	503.9 ²	504.7	0.8
D	21,120	400	6,417	6.5	508.5	508.5	509.2	0.7
E	31,680	720	9,697	4.3	514.6	514.6	515.5	0.9
F	34,954	300	6,420	6.5	516.3	516.3	517.2	0.9
G	43,507	370	7,670	5.4	521.3	521.3	522.0	0.7
H	52,166	300	7,990	5.2	526.1	526.1	526.7	0.6
I	52,800	500	12,477	3.3	526.4	526.4	527.1	0.7
J	53,170	500	7,152	5.8	526.5	526.5	527.2	0.7
K	54,384	500	7,417	5.6	528.1	528.1	529.1	1.0
L	55,440	500	8,117	5.1	529.2	529.2	530.2	1.0
M	58,080	400	6,567	6.3	531.8	531.8	532.6	0.8
N	61,248	350	6,988	5.9	535.5	535.5	536.3	0.8
O	64,944	350	7,937	5.2	538.3	538.3	539.1	0.8
P	68,640	360	8,560	4.6	540.3	540.3	541.1	0.8
Q	70,752	380	8,238	4.8	541.2	541.2	541.9	0.7
R	74,976	430	8,712	4.5	543.7	543.7	544.3	0.6
S	76,560	455	10,078	3.9	544.5	544.5	545.1	0.6
T	78,144	370	7,308	5.4	544.8	544.8	545.8	1.0
U	79,200	335	7,211	5.5	545.6	545.6	546.4	0.8
V	80,784	330	7,405	5.3	546.9	546.9	547.7	0.8

¹ Feet above confluence with J. Percy Priest Reservoir

² Elevation computed without consideration of backwater effects from the J. Percy Priest Reservoir

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: EAST FORK STONES RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
W	81,154	300	7,600	5.2	548.5	548.5	548.9	0.4
X	83,424	330	7,646	5.2	549.3	549.3	549.8	0.5
Y	85,747	340	7,893	5.0	549.9	549.9	550.7	0.8
Z	87,806	340	7,749	5.1	550.7	550.7	551.5	0.8
AA	88,704	320	8,536	4.6	551.1	551.1	552.1	1.0
AB	89,232	336	9,115	4.2	551.5	551.5	552.4	0.9
AC	89,760	350	8,349	4.6	551.5	551.5	552.4	0.9
AD	92,400	362	8,433	4.5	552.8	552.8	553.7	0.9
AE	94,512	360	8,566	4.4	553.4	553.4	554.4	1.0
AF	97,152	300	5,251	7.2	554.8	554.8	555.8	1.0
AG	98,736	300	6,189	6.1	556.9	556.9	557.8	0.9
AH	99,211	464	8,989	4.2	557.9	557.9	558.8	0.9
AI	100,426	300	6,127	6.2	559.8	559.8	559.8	0.0

¹ Feet above confluence with J. Percy Priest Reservoir

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: EAST FORK STONES RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	5,808	108	629	5.8	506.3	505.7 ²	506.7	1.0
B	7,603	200	724	5.0	512.5	512.5	512.5	0.0
C	9,240	55	380	9.5	524.5	524.5	524.5	0.0
D	10,771	240	1,499	2.1	528.4	528.4	529.1	0.7
E	11,933	194	692	4.6	535.0	535.0	535.0	0.0
F	13,042	195	789	4.1	541.6	541.6	541.7	0.1
G	13,147	200	1,230	2.6	543.6	543.6	543.6	0.0
H	14,045	189	679	4.7	545.8	545.8	545.9	0.1
I	14,890	200	506	5.5	552.0	552.0	552.2	0.2
J	15,418	200	832	3.3	553.9	553.9	554.7	0.8
K	17,002	25	148	13.9	561.9	561.9	561.9	0.0
L	17,477	125	1,732	1.2	577.0	577.0	577.0	0.0
M	19,008	125	1,112	1.8	577.1	577.1	577.3	0.2
N	20,064	125	760	2.4	577.9	577.9	578.9	1.0

¹ Feet above the confluence with Stewart Creek

² Elevation computed without consideration of backwater effects from J. Percy Priest Reservoir

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: FINCH BRANCH

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	592,541	200	1,491	2.4	707.5	707.5	708.3	0.8
B	592,771	139	1,208	2.9	707.6	707.6	708.4	0.8
C	593,196	450	3,193	1.1	707.9	707.9	708.9	1.0

¹ Feet above the confluence with Cumberland River

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: HARPETH RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,877	411	3,072	1.8	511.9	511.9	512.9	1.0
B	3,560	185	1,944	2.9	513.7	513.7	514.6	0.9
C	5,078	72	716	7.4	515.5	515.5	516.2	0.7
D	6,976	115	927	5.8	520.0	520.0	520.6	0.6
E	8,500	311	2,186	2.3	526.3	526.3	527.2	0.9
F	10,343	132	801	6.3	529.0	529.0	529.7	0.7
G	11,817	150	1,044	4.8	532.8	532.8	533.7	0.9
H	13,547	312	1,535	3.3	534.6	534.6	535.6	1.0
I	14,856	196	1,846	2.7	537.0	537.0	537.8	0.8

¹ Feet above the confluence with Stewart Creek

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: HARTS BRANCH

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	4,136	320	2,370	5.3	509.3	509.3	510.1	0.8
B	5,206	320 / 205 ²	2,616	4.8	514.6	514.6	515.2	0.6
C	6,497	430 / 175 ²	2,323	5.4	519.6	519.6	520.2	0.6
D	7,711	423 / 331 ²	2,223	5.5	524.9	524.9	525.5	0.6
E	9,480	425 / 374 ²	2,686	4.5	532.3	532.3	532.6	0.3
F	10,879	210 / 77 ²	1,653	6.1	539.8	539.8	540.0	0.2
G	12,023	260 / 123 ²	2,093	4.8	547.0	547.0	547.8	0.8
H	13,429	260 / 149 ²	1,401	6.7	550.3	550.3	550.9	0.6
I	14,905	385 / 86 ²	4,451	2.1	562.2	562.2	562.2	0.0
J	16,306	235 / 10 ²	1,823	4.5	562.9	562.9	562.9	0.0
K	17,968	250	1,601	5.2	565.9	565.9	566.5	0.6
L	19,737	230 / 88 ²	1,909	1.3	577.0	577.0	577.8	0.8
M	21,060	65 / 0 ²	320	6.7	577.8	577.8	578.6	0.8
N	22,560	84 / 0 ²	529	4.1	590.2	590.2	591.0	0.8

¹ Feet above the confluence with J. Percy Priest Reservoir

² Width / Width within jurisdiction

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: HURRICANE CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,776	393	1,298	2.2	624.3	624.3	624.9	0.6
B	3,038	340	1,263	2.2	626.7	626.7	627.3	0.6
C	4,274	400	1,640	1.7	629.7	629.7	630.3	0.6
D	6,259	415	1,246	1.8	632.4	632.4	633.0	0.6
E	8,063	320	782	2.8	637.0	637.0	637.8	0.8
F	9,726	220	757	2.8	642.9	642.9	643.6	0.7
G	10,783	244	811	1.8	646.3	646.3	646.9	0.6
H	11,655	180	386	0.6	646.8	646.8	647.4	0.6

¹ Feet above the confluence with Lytle Creek

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: LEES SPRING BRANCH

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	3,885	136	760	8.1	573.2	573.2	573.6	0.4
B	5,486	298	2,004	3.1	579.0	579.0	579.8	0.8
C	6,956	244	2,741	2.3	583.1	583.1	583.9	0.8
D	9,214	106	889	4.3	588.1	588.1	588.1	0.0
E	10,144	102	695	5.5	590.0	590.0	590.1	0.1
F	11,853	156	1,251	3.9	594.4	594.4	594.6	0.2
G	13,055	153	1,503	3.2	595.0	595.0	595.5	0.5
H	14,999	120	1,005	4.8	596.8	596.8	597.2	0.4
I	16,296	369	3,207	1.5	597.4	597.4	598.1	0.7
J	17,714	312	2,049	2.3	597.8	597.8	598.7	0.9
K	19,283	368	1,669	2.8	599.1	599.1	599.8	0.7
L	21,221	345	1,756	2.7	601.6	601.6	602.5	0.9
M	22,867	469	2,511	1.9	604.6	604.6	605.5	0.9
N	24,093	584	3,197	1.5	605.7	605.7	606.6	0.9
O	25,504	374	2,485	1.9	608.4	608.4	609.1	0.7
P	27,028	308	1,731	2.7	609.8	609.8	610.6	0.8
Q	28,590	645	4,921	1.0	615.3	615.3	615.7	0.4
R	30,078	615	3,562	1.3	615.6	615.6	616.0	0.4
S	31,716	572	2,703	1.7	616.8	616.8	617.3	0.5
T	33,667	552	2,075	1.9	618.4	618.4	619.1	0.7
U	36,071	997	1,785	1.8	621.6	621.6	622.6	1.0
V	38,151	396	1,531	2.1	625.6	625.6	626.6	1.0

¹ Feet above the confluence with West Fork Stones River

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: LYTLE CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
W	39,624	234	1,069	3.1	627.3	627.3	628.1	0.8
X	41,295	190	985	3.3	629.9	629.9	630.5	0.6
Y	42,676	111	621	4.1	632.0	632.0	632.6	0.6
Z	44,346	55	373	6.8	634.5	634.5	635.2	0.7
AA	45,917	96	574	4.4	637.8	637.8	638.4	0.6
AB	47,558	94	458	4.9	642.0	642.0	642.3	0.3
AC	48,781	102	485	4.6	644.7	644.7	645.4	0.7
AD	50,522	105	650	3.4	647.9	647.9	648.8	0.9
AE	52,194	137	710	3.1	651.8	651.8	652.6	0.8
AF	53,880	328	1,045	2.1	654.3	654.3	655.2	0.9
AG	55,010	169	697	3.2	656.7	656.7	657.1	0.4

¹ Feet above the confluence with West Fork Stones River

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: LYTLE CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	357	98	184	4.9	588.0	588.0	588.0	0.0
B	1,146	201	745	1.2	588.6	588.6	588.7	0.1
C	2,861	74	232	3.9	590.9	590.9	591.4	0.5

¹ Feet above the confluence with Lytle Creek

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: LYTLE CREEK OVERFLOW

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	2,798	227	3,921	8.0	596.4	596.4	597.1	0.7
B	5,386	523	4,882	6.4	602.2	602.2	602.6	0.4
C	9,187	223	4,460	7.0	608.2	608.2	609.0	0.8
D	12,144	532	8,362	3.7	611.4	611.4	612.3	0.9
E	14,995	304	5,393	5.8	613.5	613.5	614.3	0.8
F	17,899	645	9,222	3.4	617.4	617.4	618.2	0.8
G	22,176	542	6,557	4.8	620.5	620.5	621.4	0.9
H	29,040	855	11,087	2.8	626.6	626.6	627.6	1.0
I	34,637	433	6,111	5.1	630.7	630.7	631.7	1.0
J	36,960	802	8,535	3.7	633.7	633.7	634.6	0.9
K	42,240	1,478	17,592	1.2	636.0	636.0	637.0	1.0
L	47,520	450	3,668	5.7	642.8	642.8	643.6	0.8
M	52,800	485	3,232	6.5	651.4	651.4	652.1	0.7

¹ Feet above the confluence with West Fork Stones River

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: MIDDLE FORK STONES RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,509	302	1,014	4.7	531.4	524.2 ²	524.3	0.1
B	2,251	399	1,705	2.8	531.4	527.2 ²	527.3	0.1
C	3,152	124	788	6.0	531.4	529.9 ²	530.1	0.2
D	3,397	105	1,040	4.6	532.5	532.5	533.1	0.6
E	3,940	160	1,534	3.1	535.6	535.6	535.8	0.2
F	4,450	198	1,395	3.4	537.8	537.8	537.9	0.1
G	4,866	200	1,477	3.2	539.5	539.5	539.5	0.0
H	5,118	287	2,612	1.8	539.8	539.8	539.8	0.0
I	6,907	186	794	5.6	540.9	540.9	541.1	0.2
J	9,306	267	1,394	3.2	549.3	549.3	550.3	1.0
K	9,935	210	874	5.0	551.5	551.5	552.1	0.6
L	10,244	292	1,416	2.9	552.6	552.6	553.6	1.0
M	10,988	221	795	5.2	554.7	554.7	555.6	0.9
N	12,688	270	1,424	2.8	559.2	559.2	559.4	0.2
O	14,337	250	632	6.2	562.4	562.4	562.4	0.0
P	14,510	194	576	6.9	564.2	564.2	564.2	0.0
Q	15,331	206	1,416	2.3	567.5	567.5	567.6	0.1
R	15,976	245	981	2.9	568.1	568.1	568.5	0.4
S	16,927	92	504	5.6	571.4	571.4	572.3	0.9
T	16,966	64	466	6.1	571.7	571.7	572.5	0.8
U	17,730	195	768	3.7	575.5	575.5	576.1	0.6

¹ Feet above the confluence with Stewart Creek

² Elevation computed without consideration of backwater effects from Stewart Creek

TABLE 23

**FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS**

FLOODWAY DATA

FLOODING SOURCE: OLIVE BRANCH

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	212	245	3,418	5.7	532.1	526.8 ²	527.8	1.0
B	2,486	453	5,183	3.7	532.1	530.5 ²	531.4	0.9
C	3,679	385	3,811	5.1	532.1	532.1 ²	532.8	0.7
D	3,849	255	2,535	7.6	532.1	531.9 ²	532.6	0.7
E	5,440	288	3,898	4.9	538.5	538.5	539.0	0.5
F	7,031	297	5,041	3.8	539.8	539.8	540.7	0.9
G	8,989	240	3,561	5.4	540.8	540.8	541.7	0.9
H	9,542	347	5,701	3.4	544.8	544.8	545.2	0.4
I	11,230	620	5,493	3.5	546.0	546.0	546.4	0.4
J	13,175	330	3,338	5.7	548.7	548.7	549.2	0.5
K	15,195	295	3,746	5.1	552.7	552.7	553.1	0.4
L	17,092	533	6,032	3.1	555.2	555.2	555.7	0.5
M	18,300	420	4,160	4.5	556.3	556.3	556.8	0.5
N	19,073	900	10,864	1.6	557.1	557.1	558.0	0.9
O	19,597	493	6,746	2.6	558.0	558.0	558.6	0.6
P	21,341	430	5,552	3.2	558.9	558.9	559.6	0.7
Q	23,618	930	8,971	1.9	560.5	560.5	561.4	0.9
R	25,188	732	4,763	3.7	561.4	561.4	562.1	0.7
S	25,776	576	5,485	3.2	562.5	562.5	563.3	0.8
T	26,938	513	5,567	3.1	566.9	566.9	567.3	0.4
U	27,628	348	3,433	5.0	567.0	567.0	567.5	0.5
V	27,967	445	3,557	4.8	567.5	567.5	568.2	0.7

¹ Feet above the confluence with West Fork Stones River

² Elevation computed without consideration of backwater effects from West Fork Stones River

TABLE 23

**FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS**

FLOODWAY DATA

FLOODING SOURCE: OVERALL CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
W	29,001	610	3,859	4.4	569.8	569.8	570.5	0.7
X	30,509	500	4,024	3.3	572.7	572.7	573.3	0.6
Y	32,328	480	2,556	5.1	574.7	574.7	575.3	0.6
Z	34,817	460	2,862	4.5	580.2	580.2	580.8	0.6
AA	36,314	460	3,119	3.7	582.8	582.8	583.4	0.6
AB	37,102	380	2,732	4.2	583.6	583.6	584.2	0.6
AC	38,044	340	2,859	4.0	587.6	587.6	588.1	0.5
AD	39,585	150	1,536	7.5	589.6	589.6	590.2	0.6
AE	40,919	450	3,191	3.6	592.6	592.6	593.5	0.9
AF	42,612	150	1,518	7.5	595.4	595.4	595.9	0.5
AG	43,760	300	2,649	4.3	598.9	598.9	599.6	0.7
AH	44,054	120	1,493	7.6	599.2	599.2	599.9	0.7
AI	44,255	180	2,336	4.9	601.2	601.2	601.9	0.7
AJ	48,544	170	1,181	9.6	605.3	605.3	605.7	0.4
AK	51,712	273	2,066	5.5	613.0	613.0	613.9	0.9
AL	56,729	450	2,608	4.4	620.7	620.7	621.6	0.9
AM	59,369	489	3,202	3.5	625.1	625.1	626.0	0.9
AN	62,009	450	2,400	4.7	629.1	629.1	629.9	0.8
AO	64,009	714	3,309	3.4	633.7	633.7	634.6	0.9

¹ Feet above the confluence with West Fork Stones River

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: OVERALL CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	528	337	2,982	3.7	571.7	571.2 ²	572.2	1.0
B	2,640	346	2,617	4.2	574.2	574.2	575.1	0.9
C	5,280	427	3,079	3.6	579.4	579.4	580.4	1.0
D	7,973	450	2,603	4.2	585.5	585.5	586.0	0.5
E	10,824	456	2,658	4.1	592.6	592.6	593.5	0.9
F	13,200	631	3,275	3.4	597.4	597.4	598.2	0.8
G	16,368	401	2,573	4.3	606.4	606.4	607.2	0.8
H	17,582	526	2,970	3.7	609.2	609.2	610.1	0.9
I	21,173	511	3,235	3.4	616.9	616.9	617.9	1.0
J	23,813	547	3,496	3.1	623.0	623.0	623.9	0.9
K	26,189	525	3,703	3.0	627.0	627.0	627.7	0.7

¹ Feet above the confluence with Overall Creek

² Elevation computed without consideration of backwater effects from Overall Creek

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: PUCKETT CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	0	325	2,525	1.8	537.3	537.3	538.3	1.0
B	1,478	101	524	7.3	541.5	541.5	541.7	0.2
C	2,946	101	799	4.8	547.2	547.2	547.7	0.5
D	4,669	170	802	4.8	554.8	554.8	555.7	0.9
E	6,162	219	1,317	2.9	566.3	566.3	566.3	0.0
F	7,678	101	473	8.1	573.5	573.5	574.0	0.5
G	9,278	130	875	4.4	581.6	581.6	582.1	0.5
H	10,878	225	705	4.3	588.5	588.5	589.3	0.8
I	12,478	50	246	12.3	600.5	600.5	600.5	0.0
J	13,944	108	447	6.7	610.1	610.1	610.7	0.6
K	15,478	141	376	6.1	618.1	618.1	618.6	0.5
L	17,078	144	636	3.6	626.2	626.2	626.9	0.7
M	18,544	209	740	2.0	632.3	632.3	633.2	0.9
N	20,053	100	325	4.6	637.2	637.2	637.5	0.3
O	21,678	96	206	7.3	647.5	647.5	647.9	0.4
P	23,050	118	346	5.0	657.8	657.8	657.9	0.1
Q	24,678	160	336	4.5	669.1	669.1	669.7	0.6
R	26,167	85	212	3.8	677.4	677.4	677.8	0.4
S	27,232	52	112	7.2	686.6	686.6	686.9	0.3
T	28,208	32	100	8.1	700.6	700.6	700.7	0.1

¹ Feet above the confluence with Harts Branch

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: ROCK SPRING BRANCH

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	2,550	108	458	4.9	546.5	534.8 ²	535.0	0.2
B	4,926	120	465	4.8	547.9	547.9	548.3	0.4
C	6,376	126	641	3.5	553.9	553.9	554.2	0.3
D	8,626	125	732	3.0	558.1	558.1	559.0	0.9
E	10,326	136	557	4.0	562.6	562.6	563.6	1.0
F	12,501	140	693	3.2	568.6	568.6	569.1	0.5
G	12,914	155	1,103	2.0	571.7	571.7	572.3	0.6
H	15,384	105	440	3.9	577.4	577.4	577.7	0.3
I	16,371	66	367	3.8	583.1	583.1	583.9	0.8
J	17,816	110	398	3.5	587.6	587.6	588.0	0.4
K	18,341	125	493	2.3	592.4	592.4	593.2	0.8
L	18,975	165	578	2.0	593.1	593.1	593.8	0.7
M	20,100	150	385	3.0	595.7	595.7	596.1	0.4
N	20,990	210	716	1.6	596.6	596.6	597.3	0.7
O	21,729	265	922	1.3	597.0	597.0	597.6	0.6
P	23,189	125	854	1.4	600.4	600.4	600.7	0.3
Q	23,949	125	602	1.9	600.4	600.4	600.9	0.5
R	24,168	135	589	2.0	600.5	600.5	601.5	1.0
S	25,353	125	447	1.9	601.4	601.4	602.1	0.7
T	25,843	125	209	4.1	602.3	602.3	602.8	0.5
U	26,208	100	524	1.3	605.1	605.1	605.7	0.6
V	27,264	27	146	4.8	605.3	605.3	606.1	0.8

¹ Feet above the confluence with West Fork Stones River

² Elevation computed without consideration of backwater effects from West Fork Stones River

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: SINKING CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
W	27,559	42	187	3.7	609.6	609.6	609.8	0.2
X	27,654	55	277	2.5	611.8	611.8	612.6	0.8
Y	28,544	300	2,416	0.3	612.2	612.2	612.9	0.7

¹ Feet above the confluence with West Fork Stones River

TABLE 23

**FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS**

FLOODWAY DATA

FLOODING SOURCE: SINKING CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	15,437	482	4,957	6.0	506.5	506.5	506.8	0.3
B	17,133	582	4,570	3.4	508.8	508.8	509.5	0.7
C	18,079	462	5,378	2.9	509.8	509.8	510.8	1.0
D	19,772	879	10,443	1.5	510.6	510.6	511.6	1.0
E	21,084	459	3,876	3.9	511.8	511.8	512.6	0.8
F	22,768	208	3,006	5.1	512.9	512.9	513.6	0.7
G	25,291	576	6,148	2.5	514.4	514.4	515.4	1.0
H	27,222	497	5,702	2.7	516.8	516.8	517.8	1.0
I	29,098	311	3,871	3.9	517.5	517.5	518.4	0.9
J	31,071	284	4,264	3.5	519.2	519.2	520.0	0.8
K	32,775	340	3,463	4.3	520.8	520.8	521.5	0.7
L	35,258	488	7,017	2.1	523.6	523.6	524.5	0.9
M	36,749	215	4,212	3.6	523.9	523.9	524.8	0.9
N	39,395	312	4,969	3.0	526.8	526.8	527.4	0.6
O	41,669	458	6,267	2.4	526.9	526.9	527.8	0.9
P	44,081	569	9,222	1.6	527.8	527.8	528.8	1.0
Q	45,550	386	5,198	2.8	528.1	528.1	529.1	1.0
R	47,492	288	4,450	3.3	529.9	529.9	530.0	0.1
S	49,227	471	6,230	2.3	530.3	530.3	530.7	0.4
T	51,452	384	5,626	2.6	530.4	530.4	531.1	0.7
U	53,481	382	5,268	2.7	530.8	530.8	531.7	0.9
V	55,255	734	8,807	1.5	531.4	531.4	532.4	1.0
W	57,080	357	3,751	3.5	532.7	532.7	533.4	0.7

¹ Feet above the confluence with J. Percy Priest Reservoir

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: STEWART CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
X	58,840	666	4,593	2.9	533.6	533.6	534.4	0.8
Y	60,834	252	2,583	5.1	536.3	536.3	537.1	0.8
Z	63,830	310	2,300	5.8	542.6	542.6	542.6	0.0
AA	65,860	334	3,062	4.3	545.7	545.7	546.4	0.7
AB	68,632	569	3,988	3.3	547.9	547.9	548.8	0.9
AC	71,032	676	6,607	1.9	551.9	551.9	552.8	0.9
AD	72,818	729	6,066	2.1	552.7	552.7	553.6	0.9
AE	74,576	449	3,307	3.8	553.3	553.3	554.2	0.9
AF	76,778	584	4,910	2.6	555.9	555.9	556.8	0.9
AG	78,560	604	5,057	2.1	556.5	556.5	557.5	1.0
AH	80,542	757	5,455	1.9	557.4	557.4	558.3	0.9
AI	82,343	666	3,940	2.7	558.3	558.3	559.2	0.9
AJ	85,169	621	3,182	3.2	559.8	559.8	560.7	0.9
AK	86,970	372	2,051	4.9	561.5	561.5	562.5	1.0
AL	88,988	476	3,354	3.0	564.9	564.9	565.8	0.9
AM	91,355	384	2,094	4.3	566.6	566.6	567.4	0.8
AN	92,973	478	3,544	2.5	569.8	569.8	570.4	0.6
AO	95,362	296	1,345	3.4	571.8	571.8	572.7	0.9
AP	98,357	59	482	6.9	578.4	578.4	579.1	0.7
AQ	100,181	120	563	5.9	584.5	584.5	585.5	1.0
AR	101,801	123	733	4.6	591.4	591.4	592.3	0.9
AS	103,458	144	718	4.6	597.9	597.9	598.1	0.2
AT	104,926	56	636	5.2	603.7	603.7	603.8	0.1

¹ Feet above the confluence with J. Percy Priest Reservoir

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: STEWART CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	477	200	459	1.6	644.5	644.5	645.2	0.7
B	1,767	100	261	2.8	649.6	649.6	650.3	0.7

¹ Feet above the confluence with Lytle Creek

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY RUTHERFORD COUNTY, TENNESSEE AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: UNNAMED TRIBUTARY TO LEES SPRING BRANCH

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	528	200	758	4.6	585.9	576.0 ²	577.0	1.0
B	2,640	255	1,245	2.8	587.2	581.1 ³	581.7	0.6
C	4,118	42	306	11.4	587.2	586.5 ³	587.3	0.8
D	4,858	325	863	4.0	592.9	592.9	592.9	0.0
E	6,864	691	1,163	3.0	599.0	599.0	599.0	0.0
F	7,286	473	2,242	1.6	602.1	602.1	602.1	0.0
G	8,606	190	581	4.5	602.7	602.7	603.1	0.4
H	10,454	166	607	4.3	607.7	607.7	608.6	0.9
I	12,830	110	326	8.0	615.3	615.3	615.7	0.4
J	15,840	179	595	4.4	626.3	626.3	626.9	0.6

¹ Feet above the confluence with West Fork Stones River

² Elevation computed without consideration of controlled by effects from West Fork Stones River

³ Elevation computed without consideration of backwater effects from West Fork Stones River

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: UNNAMED TRIBUTARY TO WEST FORK STONES RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	0.02	159	1,214	5.0	527.0	518.8 ²	519.8	1.0
B	0.27	84	1,004	6.0	527.0	521.8 ²	522.5	0.7
C	0.29	46	490	12.4	527.0	521.8 ²	522.8	1.0
D	0.32	108	1,340	4.5	527.0	524.4 ²	525.0	0.6
E	0.50	115	1,135	5.3	527.0	525.5 ²	526.3	0.8
F	0.70	133	909	6.7	528.4	528.4	529.4	1.0
G	0.95	140	1,099	5.5	533.7	533.7	534.7	1.0
H	1.17	193	951	6.4	538.4	538.4	539.2	0.8
I	1.69	138	1,039	5.5	550.4	550.4	551.4	1.0
J	2.44	126	842	6.3	563.9	563.9	564.9	1.0
K	2.83	209	915	5.3	573.9	573.9	574.8	0.9

¹ Miles above the confluence with East Fork Stones River

² Elevation computed without consideration of backwater effects from East Fork Stones River

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: WADES BRANCH

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	317	255	6,861	8.7	506.3	499.5 ²	500.5	1.0
B	2,904	523	9,685	6.2	506.3	501.6 ²	502.6	1.0
C	4,330	270	6,958	8.6	506.3	502.5 ²	503.4	0.9
D	12,883	1,339	18,907	3.2	508.9	508.9	509.9	1.0
E	15,312	1,359	20,814	2.9	509.7	509.7	510.7	1.0
F	16,949	664	10,025	6.0	509.9	509.9	510.8	0.9
G	21,806	433	8,187	7.3	514.2	514.2	515.2	1.0
H	24,922	609	11,577	5.2	517.1	517.1	518.0	0.9
I	27,984	359	7,662	7.8	519.0	519.0	519.8	0.8
J	32,102	398	7,996	4.3	523.0	523.0	523.8	0.8
K	34,214	1,128	11,807	2.9	524.0	524.0	525.0	1.0
L	34,320	2,325	19,585	3.0	524.1	524.1	525.1	1.0
M	36,168	673	9,489	6.3	524.7	524.7	525.7	1.0
N	38,755	949	12,689	4.6	528.6	528.6	529.0	0.4
O	41,818	797	12,895	4.5	531.6	531.6	531.9	0.3
P	42,557	1,088	15,865	3.2	532.4	532.4	532.6	0.2
Q	44,669	1,713	20,285	2.5	533.4	533.4	533.6	0.2
R	47,731	1,473	15,062	3.4	534.8	534.8	535.0	0.2
S	50,266	807	10,768	4.7	536.9	536.9	537.0	0.1
T	54,490	588	10,408	4.9	542.2	542.2	542.9	0.7
U	59,770	592	10,854	4.6	546.7	546.7	547.2	0.5
V	62,885	638	10,670	4.7	550.3	550.3	550.6	0.3

¹ Feet above the confluence with J. Percy Priest Reservoir

² Elevation computed without consideration of backwater effect from J. Percy Priest Reservoir

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: WEST FORK STONES RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
W	67,056	559	9,380	5.3	553.8	553.8	554.1	0.3
X	70,752	300	6,119	8.1	557.4	557.4	557.5	0.1
Y	72,706	398	9,051	5.5	559.9	559.9	560.5	0.6
Z	75,874	588	9,971	4.9	561.8	561.8	562.3	0.5
AA	76,190	638	11,237	4.4	563.3	563.3	563.7	0.4
AB	78,091	757	9,422	5.2	564.1	564.1	564.6	0.5
AC	81,734	383	6,883	7.1	566.7	566.7	567.1	0.4
AD	83,318	511	10,814	4.5	570.0	570.0	570.4	0.4
AE	84,163	448	9,451	5.2	571.2	571.2	571.5	0.3
AF	84,744	807	11,506	4.3	572.6	572.6	573.0	0.4
AG	86,750	406	8,754	5.3	573.4	573.4	573.9	0.5
AH	90,288	769	13,088	3.5	574.8	574.8	575.3	0.5
AI	94,195	574	9,400	4.9	576.8	576.8	577.4	0.6
AJ	96,202	491	10,266	4.5	579.5	579.5	580.1	0.6
AK	100,742	350	6,694	6.9	580.7	580.7	581.6	0.9
AL	103,277	826	13,458	3.4	582.4	582.4	583.2	0.8
AM	106,445	358	6,687	6.8	583.0	583.0	584.0	1.0
AN	110,986	436	6,432	7.1	587.7	587.7	588.3	0.6
AO	111,778	545	10,272	4.4	590.0	590.0	591.0	1.0
AP	113,890	877	9,414	4.8	591.6	591.6	592.5	0.9
AQ	115,104	605	7,854	5.7	593.2	593.2	593.7	0.5
AR	115,421	857	8,315	2.1	594.4	594.4	594.8	0.4

¹ Feet above the confluence with J. Percy Priest Reservoir

TABLE 23

**FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS**

FLOODWAY DATA

FLOODING SOURCE: WEST FORK STONES RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AS	118,325	571	4,856	3.7	595.7	595.7	596.0	0.3
AT	122,760	559	5,209	4.2	603.3	603.3	603.4	0.1
AU	124,819	485	3,245	5.5	607.3	607.3	607.5	0.2
AV	126,984	350	2,975	6.0	613.1	613.1	613.4	0.3
AW	129,941	700	6,659	2.7	618.4	618.4	618.6	0.2
AX	132,370	393	4,219	4.2	620.2	620.2	620.4	0.2
AY	135,907	474	3,523	4.7	625.4	625.4	625.6	0.2
AZ	139,445	1,550	8,616	1.9	629.7	629.7	630.1	0.4
BA	142,877	1,313	4,775	3.4	633.5	633.5	634.1	0.6
BB	147,101	992	4,783	2.4	642.0	642.0	642.4	0.4
BC	150,110	1,461	6,619	1.7	645.7	645.7	645.8	0.1
BD	151,166	976	4,392	2.4	646.7	646.7	646.9	0.2
BE	154,440	610	2,469	4.3	654.9	654.9	655.0	0.1
BF	158,189	682	3,933	2.7	664.0	664.0	664.1	0.1
BG	161,410	500	*	*	674.5	*	*	*

¹ Feet above the confluence with J. Percy Priest Reservoir

* Data not available

TABLE 23

**FEDERAL EMERGENCY MANAGEMENT AGENCY
RUTHERFORD COUNTY, TENNESSEE
AND INCORPORATED AREAS**

FLOODWAY DATA

FLOODING SOURCE: WEST FORK STONES RIVER

Table 24: Flood Hazard and Non-Encroachment Data for Selected Streams

[Not Applicable to this Flood Risk Project]

6.4 Coastal Flood Hazard Mapping

This section is not applicable to this Flood Risk Project.

Table 25: Summary of Coastal Transect Mapping Considerations

[Not Applicable to this Flood Risk Project]

6.5 FIRM Revisions

This FIS Report and the FIRM are based on the most up-to-date information available to FEMA at the time of its publication; however, flood hazard conditions change over time. Communities or private parties may request flood map revisions at any time. Certain types of requests require submission of supporting data. FEMA may also initiate a revision. Revisions may take several forms, including Letters of Map Amendment (LOMAs), Letters of Map Revision Based on Fill (LOMR-Fs), Letters of Map Revision (LOMRs) (referred to collectively as Letters of Map Change (LOMCs)), Physical Map Revisions (PMRs), and FEMA-contracted restudies. These types of revisions are further described below. Some of these types of revisions do not result in the republishing of the FIS Report. To assure that any user is aware of all revisions, it is advisable to contact the community repository of flood-hazard data (shown in Table 30, “Map Repositories”).

6.5.1 Letters of Map Amendment

A LOMA is an official revision by letter to an effective NFIP map. A LOMA results from an administrative process that involves the review of scientific or technical data submitted by the owner or lessee of property who believes the property has incorrectly been included in a designated SFHA. A LOMA amends the currently effective FEMA map and establishes that a specific property is not located in a SFHA.

To obtain an application for a LOMA, visit www.fema.gov/flood-maps/change-your-flood-zone and download the form “MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill”. Visit the “Flood Map-Related Fees” section to determine the cost, if any, of applying for a LOMA.

FEMA offers a tutorial on how to apply for a LOMA. The LOMA Tutorial Series can be accessed at www.fema.gov/flood-maps/tutorials.

For more information about how to apply for a LOMA, call the FEMA Mapping and Insurance eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627).

6.5.2 Letters of Map Revision Based on Fill

A LOMR-F is an official revision by letter to an effective NFIP map. A LOMR-F states FEMA’s determination concerning whether a structure or parcel has been elevated on fill above the base flood elevation and is, therefore, excluded from the SFHA.

Information about obtaining an application for a LOMR-F can be obtained in the same manner as that for a LOMA, by visiting [www.fema.gov/flood-maps/change-your-flood-](http://www.fema.gov/flood-maps/change-your-flood-zone)

[zone](#) for the “MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill” or by calling the FEMA Mapping and Insurance eXchange, toll free, at 1-877-FEMA MAP (1-877-336-2627). Fees for applying for a LOMR-F, if any, are listed in the “Flood Map-Related Fees” section.

A tutorial for LOMR-F is available at www.fema.gov/flood-maps/tutorials.

6.5.3 Letters of Map Revision

A LOMR is an official revision to the currently effective FEMA map. It is used to change flood zones, floodplain and floodway delineations, flood elevations and planimetric features. All requests for LOMRs should be made to FEMA through the chief executive officer of the community, since it is the community that must adopt any changes and revisions to the map. If the request for a LOMR is not submitted through the chief executive officer of the community, evidence must be submitted that the community has been notified of the request.

To obtain an application for a LOMR, visit www.fema.gov/flood-maps/change-your-flood-zone and download the form “MT-2 Application Forms and Instructions for Conditional Letters of Map Revision and Letters of Map Revision”. Visit the “Flood Map-Related Fees” section to determine the cost of applying for a LOMR. For more information about how to apply for a LOMR, call the FEMA Mapping and Insurance eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627) to speak to a Map Specialist.

Previously issued mappable LOMCs (including LOMRs) that have been incorporated into the Rutherford County FIRM are listed in Table 26. Please note that this table only includes LOMCs that have been issued on the FIRM panels updated by this map revision. For all other areas within this county, users should be aware that revisions to the FIS Report made by prior LOMRs may not be reflected herein and users will need to continue to use the previously issued LOMRs to obtain the most current data.

Table 26: Incorporated Letters of Map Change

Case Number	Effective Date	Flooding Source	FIRM Panel(s)
06-04-C283P	08/02/2007	Overall Creek	47149C0255H
07-04-2511P	07/26/2007	Puckett Creek	47149C0255H
09-04-0707P	03/04/2010	Middle Fork Stones River and West Fork Stones River	47149C0270H 47149C0260H
09-04-3370P	11/12/2009	Fall Creek	47149C0063H
09-04-3372P	10/29/2009	Todds Lake	47149C0280H 47149C0290H
09-04-3567P ¹	04/23/2010	West Fork Stones River	47149C0140H 47149C0145H 47149C0255H 47149C0260H
10-04-6789P	08/31/2010	Unnamed Tributary 184	47149C0020J
13-04-7742P	07/25/2014	West Fork Stones River	47149C0129H 47149C0140H

¹ The boundary from this LOMR is not reflected in this Flood Risk Project

6.5.4 Physical Map Revisions

A Physical Map Revisions (PMR) is an official republication of a community's NFIP map to effect changes to base flood elevations, floodplain boundary delineations, regulatory floodways and planimetric features. These changes typically occur as a result of structural works or improvements, annexations resulting in additional flood hazard areas or correction to base flood elevations or SFHAs.

The community's chief executive officer must submit scientific and technical data to FEMA to support the request for a PMR. The data will be analyzed and the map will be revised if warranted. The community is provided with copies of the revised information and is afforded a review period. When the base flood elevations are changed, a 90-day appeal period is provided. A 6-month adoption period for formal approval of the revised map(s) is also provided.

For more information about the PMR process, please visit www.fema.gov and visit the "Flood Map Revision Processes" section.

6.5.5 Contracted Restudies

The NFIP provides for a periodic review and restudy of flood hazards within a given community. FEMA accomplishes this through a national watershed-based mapping needs assessment strategy, known as the Coordinated Needs Management Strategy (CNMS). The CNMS is used by FEMA to assign priorities and allocate funding for new flood hazard analyses used to update the FIS Report and FIRM. The goal of CNMS is to define the validity of the engineering study data within a mapped inventory. The CNMS is used to track the assessment process, document engineering gaps and their resolution, and aid in prioritization for using flood risk as a key factor for areas identified for flood map updates. Visit www.fema.gov to learn more about the CNMS or contact the FEMA Regional Office listed in Section 8 of this FIS Report.

6.5.6 Community Map History

The current FIRM presents flooding information for the entire geographic area of Rutherford County. Previously, separate FIRMs, Flood Hazard Boundary Maps (FHBMs) and/or Flood Boundary and Floodway Maps (FBFMs) may have been prepared for the incorporated communities and the unincorporated areas in the county that had identified SFHAs. Current and historical data relating to the maps prepared for the project area are presented in Table 27, "Community Map History." A description of each of the column headings and the source of the date is also listed below.

- *Community Name* includes communities falling within the geographic area shown on the FIRM, including those that fall on the boundary line, nonparticipating communities, and communities with maps that have been rescinded. Communities with No Special Flood Hazards are indicated by a footnote. If all maps (FHBM, FBFM, and FIRM) were rescinded for a community, it is not listed in this table unless SFHAs have been identified in this community.
- *Initial Identification Date (First NFIP Map Published)* is the date of the first NFIP map that identified flood hazards in the community. If the FHBM has been converted to a FIRM, the initial FHBM date is shown. If the community has never been mapped, the upcoming effective date or "pending" (for Preliminary FIS Reports) is shown. If the community is listed in Table 27 but not identified on the map, the community is treated as if it were unmapped.

- *Initial FHBM Effective Date* is the effective date of the first FHBM. This date may be the same date as the Initial NFIP Map Date.
- *FHBM Revision Date(s)* is the date(s) that the FHBM was revised, if applicable.
- *Initial FIRM Effective Date* is the date of the first effective FIRM for the community.
- *FIRM Revision Date(s)* is the date(s) the FIRM was revised, if applicable. This is the revised date that is shown on the FIRM panel, if applicable. As countywide studies are completed or revised, each community listed should have its FIRM dates updated accordingly to reflect the date of the countywide study. Once the FIRMs exist in countywide format, as PMRs of FIRM panels within the county are completed, the FIRM Revision Dates in the table for each community affected by the PMR are updated with the date of the PMR, even if the PMR did not revise all the panels within that community.

The initial effective date for the Rutherford County FIRMs in countywide format was 05/18/1998.

Table 27: Community Map History

Community Name	Initial Identification Date	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Eagleville, City of	08/23/1974	08/23/1974	07/02/1976	06/17/1986	05/09/2023 01/05/2007 05/18/1998
La Vergne, City of	06/28/1974	06/28/1974	03/19/1976	06/15/1984	05/09/2023 10/16/2008 01/05/2007 11/08/1999 05/18/1998
Murfreesboro, City of	06/07/1974	06/07/1974	06/18/1976	07/18/1983	05/09/2023 01/05/2007 12/20/2002 11/08/1999 05/18/1998 06/02/1994
Rutherford County, Unincorporated Areas	05/26/1978	05/26/1978	N/A	06/15/1984	05/09/2023 10/16/2008 01/05/2007 12/20/2002 11/08/1999 05/18/1998 10/17/1989
Smyrna, Town of	05/31/1974	05/31/1974	11/24/1980 05/20/1977 07/30/1976	03/16/1983	05/09/2023 10/16/2008 01/05/2007 12/20/2002 05/18/1998

SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION

7.1 Contracted Studies

Table 28 provides a summary of the contracted studies, by flooding source, that are included in this FIS Report.

Table 28: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Andrews Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Armstrong Branch	10/16/2008	Site Engineering Consultants Inc. and James Civil Engineering	Under contract to the City of Murfreesboro	12/01/2003	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Armstrong Branch	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Bear Branch	12/15/1983	USACE, Nashville District	Inter-Agency Agreement No. IAA-H-9-79, Project Order No. 13	07/01/1982	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Bear Branch	06/02/1994	USACE, Nashville District	Inter-Agency Agreement No. 1 NAS IA-EMW-91-E-3529, Project Order No. 3	08/01/1991	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Big Springs Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Bradley Creek	10/16/2008	Site Engineering Consultants Inc. and James Civil Engineering	Under contract to Rutherford County Public Building Authority	12/01/2003	Rutherford County, Unincorporated Areas
Bradley Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Bradley Creek Tributary 1	05/09/2023	AECOM	HSFEHQ-09-D-0368, Task Order HSFE04-11-J-0113	05/01/2019	Rutherford County, Unincorporated Areas
Bushman Creek	11/08/1999	USACE, Nashville District	Under contract with the City of Murfreesboro	02/01/1997	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Bushman Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Cheatham Branch	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Eagleville, City of; Rutherford County, Unincorporated Areas

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Christmas Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Concord Branch	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Cripple Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Dry Branch	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Dry Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Dry Fork	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Dry Fork Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
East Branch Hurricane Creek	05/18/1998	USACE, Nashville District	Inter-Agency Agreement No. IAA-H-9-79, Project Order No. 13	08/01/1991	La Vergne, City of
East Branch Hurricane Creek	12/15/1983	USACE, Nashville District	Inter-Agency Agreement No. IAA-H-9-79, Project Order No. 13	04/01/1981	La Vergne, City of
East Branch Hurricane Creek	10/16/2008	Aubrey L. Fly & Associates	See LOMR Case Number 03-04-559P	12/29/2003	La Vergne, City of
East Branch Hurricane Creek	10/17/1989	USACE, Nashville District	Inter-Agency Agreement No. IAA-H-9-79, Project Order No. 13	07/01/1982	La Vergne, City of
East Fork Stones River	10/16/2008	Site Engineering Consultants Inc. and James Civil Engineering	Under contract to Rutherford County Public Building Authority	11/01/2003	Murfreesboro, City of; Rutherford County, Unincorporated Areas
East Fork Stones River	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
East Fork Stones River	05/09/2023	AECOM	HSFEHQ-09-D-0368, Task Order HSFE04-11-J-0113	05/01/2019	Rutherford County, Unincorporated Areas
East Fork Stones River Tributary 2	05/09/2023	AECOM	HSFEHQ-09-D-0368, Task Order HSFE04-11-J-0113	05/01/2019	Rutherford County, Unincorporated Areas
Fall Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Fall Creek	05/09/2023	URS Corporation	See LOMR Case Number 09-04-3370P	11/12/2009	Rutherford County, Unincorporated Areas

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Finch Branch	09/16/1982 12/15/1983	USACE, Nashville District	Inter-Agency Agreement No. IAA-H-9-79, Project Order No. 13	03/01/1981	La Vergne, City of; Smyrna, Town of
Finch Branch	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	La Vergne, City of
Harpeth River	05/09/2023	USACE, Nashville District	HSFE60-15-D-0003	04/01/2016	Rutherford County, Unincorporated Areas
Harpeth River	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Eagleville, City of; Rutherford County, Unincorporated Areas
Harts Branch	05/09/2023	AECOM	HSFEHQ-09-D-0368, Task Order HSFE04-11-J-0113	01/15/2018	Smyrna, Town of
Henry Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Hurricane Creek	05/09/2023	USACE, Nashville District	HSFE60-15-D-0003	05/01/2019	Rutherford County, Unincorporated Areas
Hurricane Creek #2	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Kelly Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Eagleville, City of; Rutherford County, Unincorporated Areas
Lees Spring Branch	05/09/2023	AECOM	HSFEHQ-09-D-0368, Task Order HSFE04-11-J-0113	07/01/2019	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Long Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Lytle Creek	05/09/2023	AECOM	HSFEHQ-09-D-0368, Task Order HSFE04-11-J-0113	01/15/2018	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Lytle Creek	12/20/2002	Ogden Environmental and Energy Services, Inc.	Under contract with the City of Murfreesboro	12/01/1998	Rutherford County, Unincorporated Areas
Lytle Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Lytle Creek Overflow	05/09/2023	AECOM	HSFEHQ-09-D-0368, Task Order HSFE04-11-J-0113	01/15/2018	Murfreesboro, City of
McElroy Branch	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
McKnight Branch	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
McKnight Branch	05/09/2023	AECOM	HSFEHQ-09-D-0368, Task Order HSFE04-11-J-0113	05/01/2019	Rutherford County, Unincorporated Areas
McKnight Branch Tributary	05/09/2023	AECOM	HSFEHQ-09-D-0368, Task Order HSFE04-11-J-0113	05/01/2019	Rutherford County, Unincorporated Areas
Middle Fork Stones River	05/09/2023	Neel-Schaffer, Inc.	See LOMR Case Number 09-04-0707P	03/04/2010	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Middle Fork Stones River	12/15/1983	USACE, Nashville District	Inter-Agency Agreement No. IAA-H-9-79, Project Order No. 13	07/01/1982	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Middle Fork Stones River	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Murray Branch	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Olive Branch	05/18/1998	Post, Buckley, Schuh & Jernigan Inc.	EMW-92-C-4090	04/18/1994	Rutherford County, Unincorporated Areas; Smyrna, Town of
Olive Branch	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas; Smyrna, Town of
Overall Creek	05/18/1998	Post, Buckley, Schuh & Jernigan Inc.	EMW-92-C-4090	04/18/1994	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Overall Creek	05/09/2023	Aubrey L. Fly & Associates	See LOMR Case Number 06-04-C283P	08/02/2007	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Overall Creek	05/18/1998	Post, Buckley, Schuh & Jernigan Inc.	EMW-92-C-4090	04/18/1994	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Overall Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Panther Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Puckett Creek	12/15/1983	USACE, Nashville District	Inter-Agency Agreement No. IAA-H-9-79, Project Order No. 13	07/01/1982	Murfreesboro, City of; Rutherford County, Unincorporated Areas

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Puckett Creek	05/09/2023	Ragan, Smith Associates	See LOMR Case Number 07-04-2511P	07/26/2007	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Puckett Creek	12/15/1983	USACE, Nashville District	Inter-Agency Agreement No. IAA-H-9-79, Project Order No. 13	07/01/1982	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Puckett Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Reed Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Rock Spring Branch	05/09/2023	AECOM	HSFE60-15-D-0003 Task Order HSFE60-17-J-0003	01/15/2018	La Vergne, City of; Rutherford County, Unincorporated Areas; Smyrna, Town of
Rocky Fork Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas; Smyrna, Town of
Short Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Sinking Creek	11/08/1999	USACE, Nashville District	Under contract with the City of Murfreesboro	02/01/1997	Murfreesboro, City of
Stewart Creek	05/09/2023	AECOM	HSFE60-15-D-0003 Task Order HSFE60-17-J-0003	01/15/2018	Rutherford County, Unincorporated Areas; Smyrna, Town of
Stinking Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	La Vergne, City of
Unnamed Tributary 007	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 009	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 011	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 014	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 018	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 026	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas; Smyrna, Town of
Unnamed Tributary 028	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas; Smyrna, Town of

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Unnamed Tributary 046	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Eagleville, City of; Rutherford County, Unincorporated Areas
Unnamed Tributary 047	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Eagleville, City of; Rutherford County, Unincorporated Areas
Unnamed Tributary 049	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Eagleville, City of; Rutherford County, Unincorporated Areas
Unnamed Tributary 051	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 052	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 055	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 056	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 057	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 058	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 069	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 081	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 092	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 116	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 118	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 119	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 124	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 126	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 133	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 141	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Unnamed Tributary 143	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas; Smyrna, Town of
Unnamed Tributary 144	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 150	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 177	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 179	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary 182	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	La Vergne, City of
Unnamed Tributary 183	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	La Vergne, City of
Unnamed Tributary 184	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Smyrna, Town of
Unnamed Tributary 184	05/09/2023	See LOMR Case Number 10-04-6789P	See LOMR Case Number 10-04-6789P	08/31/2010	Smyrna, Town of
Unnamed Tributary 185	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Eagleville, City of
Unnamed Tributary to Kelly Creek	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas
Unnamed Tributary to Lees Spring Branch	05/09/2023	AECOM	HSFEHQ-09-D-0368, Task Order HSFE04-11-J-0113	07/01/2019	Murfreesboro, City of
Unnamed Tributary to West Fork Stones River	12/15/1983	USACE, Nashville District	Inter-Agency Agreement No. IAA-H-9-79, Project Order No. 13	07/01/1982	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Unnamed Tributary to West Fork Stones River	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Murfreesboro, City of; Rutherford County, Unincorporated Areas
Wades Branch	12/15/1983	USACE, Nashville District	Inter-Agency Agreement No. IAA-H-9-79, Project Order No. 13	07/01/1982	Rutherford County, Unincorporated Areas
Wades Branch	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
West Fork Stones River	12/20/2002	Ogden Environmental and Energy Services, Inc.	Under contract with the City of Murfreesboro	12/01/1998	Murfreesboro, City of; Rutherford County, Unincorporated Areas; Smyrna, Town of
West Fork Stones River	05/09/2023	See LOMR Case Number 13-04-7742P	See LOMR Case Number 13-04-7742P	07/25/2014	Murfreesboro, City of; Rutherford County, Unincorporated Areas
West Fork Stones River	12/20/2002	Ogden Environmental and Energy Services, Inc.	Under contract with the City of Murfreesboro	12/01/1998	Murfreesboro, City of; Rutherford County, Unincorporated Areas
West Fork Stones River	05/09/2023	Neel-Schaffer, Inc.	See LOMR Case Number 09-04-0707P	03/04/2010	Murfreesboro, City of; Rutherford County, Unincorporated Areas;
West Fork Stones River	12/20/2002	Ogden Environmental and Energy Services, Inc.	Under contract with the City of Murfreesboro	12/01/1998	Murfreesboro, City of; Rutherford County, Unincorporated Areas
West Fork Stones River	10/16/2008	Watershed IV Alliance	EMA-2002-CO-0011A	09/01/2005	Rutherford County, Unincorporated Areas

7.2 Community Meetings

The dates of the community meetings held for this Flood Risk Project and previous Flood Risk Projects are shown in Table 29. These meetings may have previously been referred to by a variety of names (Community Coordination Officer (CCO), Scoping, Discovery, etc.), but all meetings represent opportunities for FEMA, community officials, study contractors, and other invited guests to discuss the planning for and results of the project.

Table 29: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Eagleville, City of	05/09/2023	05/05/2020	Final CCO	Stones River Watershed Communities, State of Tennessee, FEMA, and AECOM
		06/18/2019	Flood Risk Review (FRR)	FEMA, study contractors, and the community
		07/23/2012	Discovery	Representatives of Rutherford County, City of Murfreesboro, Town of Smyrna, City of La Vergne, Town of Woodbury, City of Mt. Juliet, Wilson County, Cumberland River Compact, Middle Tennessee State University, TN Dept. of Environment and Conservation, Tennessee Emergency Management Agency, State of Tennessee, USDA Natural Resources Conservation Service, USACE – Nashville District, FEMA Region IV, and the study contractor.
	10/16/2008	11/17/2005	Final CCO	Representatives of the community, FEMA, and the study contractor.
		01/27/2004	Initial CCO	Representatives of the community, FEMA, and the study contractor.
La Vergne, City of	05/09/2023	05/05/2020	Final CCO	Stones River Watershed Communities, State of Tennessee, FEMA, and AECOM
		06/18/2019	Flood Risk Review (FRR)	FEMA, study contractors, and the community
		07/23/2012	Discovery	Representatives of Rutherford County, City of Murfreesboro, Town of Smyrna, City of La Vergne, Town of Woodbury, City of Mt. Juliet, Wilson County, Cumberland River Compact, Middle Tennessee State University, TN Dept. of Environment and Conservation, Tennessee Emergency Management Agency, State of Tennessee, USDA Natural Resources Conservation Service, USACE – Nashville District, FEMA Region IV, and the study contractor.

Table 29: Community Meetings (continued)

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Murfreesboro, City of	05/09/2023	05/05/2020	Final CCO	Stones River Watershed Communities, State of Tennessee, FEMA, and AECOM
		06/18/2019	Flood Risk Review (FRR)	FEMA, study contractors, and the community
		07/23/2012	Discovery	Representatives of Rutherford County, City of Murfreesboro, Town of Smyrna, City of La Vergne, Town of Woodbury, City of Mt. Juliet, Wilson County, Cumberland River Compact, Middle Tennessee State University, TN Dept. of Environment and Conservation, Tennessee Emergency Management Agency, State of Tennessee, USDA Natural Resources Conservation Service, USACE – Nashville District, FEMA Region IV, and the study contractor.
	10/16/2008	11/17/2005	Final CCO	Representatives of the community, FEMA, and the study contractor.
		01/27/2004	Initial CCO	Representatives of the community, FEMA, and the study contractor.
Rutherford County, Unincorporated Areas	05/09/2023	05/05/2020	Final CCO	Stones River Watershed Communities, State of Tennessee, FEMA, and AECOM
		06/18/2019	Flood Risk Review (FRR)	FEMA, study contractors, and the community
		07/23/2012	Discovery	Representatives of Rutherford County, City of Murfreesboro, Town of Smyrna, City of La Vergne, Town of Woodbury, City of Mt. Juliet, Wilson County, Cumberland River Compact, Middle Tennessee State University, TN Dept. of Environment and Conservation, Tennessee Emergency Management Agency, State of Tennessee, USDA Natural Resources Conservation Service, USACE – Nashville District, FEMA Region IV, and the study contractor.
	10/16/2008	11/17/2005	Final CCO	Representatives of the community, FEMA, and the study contractor.
		01/27/2004	Initial CCO	Representatives of the community, FEMA, and the study contractor.

Table 29: Community Meetings (continued)

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Smyrna, Town of	05/09/2023	05/05/2020	Final CCO	Stones River Watershed Communities, State of Tennessee, FEMA, and AECOM
		06/18/2019	Flood Risk Review (FRR)	FEMA, study contractors, and the community
		07/23/2012	Discovery	Representatives of Rutherford County, City of Murfreesboro, Town of Smyrna, City of La Vergne, Town of Woodbury, City of Mt. Juliet, Wilson County, Cumberland River Compact, Middle Tennessee State University, TN Dept. of Environment and Conservation, Tennessee Emergency Management Agency, State of Tennessee, USDA Natural Resources Conservation Service, USACE – Nashville District, FEMA Region IV, and the study contractor.
	10/16/2008	11/17/2005	Final CCO	Representatives of the community, FEMA, and the study contractor.
		01/27/2004	Initial CCO	Representatives of the community, FEMA, and the study contractor.

SECTION 8.0 – ADDITIONAL INFORMATION

Information concerning the pertinent data used in the preparation of this FIS Report can be obtained by submitting an order with any required payment to the FEMA Engineering Library. For more information on this process, see www.fema.gov.

Table 30 is a list of the locations where FIRMs for Rutherford County can be viewed. Please note that the maps at these locations are for reference only and are not for distribution. Also, please note that only the maps for the community listed in the table are available at that particular repository. A user may need to visit another repository to view maps from an adjacent community.

Table 30: Map Repositories

Community	Address	City	State	Zip Code
Eagleville, City of	City Hall 108 South Main Street	Eagleville	TN	37060
La Vergne, City of	Planning and Codes Department 5175 Murfreesboro Road	La Vergne	TN	37086
Murfreesboro, City of	City Hall 111 West Vine Street	Murfreesboro	TN	37130
Rutherford County, Unincorporated Areas	Rutherford County Planning Department 1 South Public Square, Room 200	Murfreesboro	TN	37130
Smyrna, Town of	Town Hall 315 South Lowry Street	Smyrna	TN	37167

The National Flood Hazard Layer (NFHL) dataset is a compilation of effective FIRM Databases and LOMCs. Together they create a GIS data layer for a State or Territory. The NFHL is updated as studies become effective and extracts are made available to the public monthly. NFHL data can be viewed or ordered from the website shown in Table 31.

Table 31 contains useful contact information regarding the FIS Report, the FIRM, and other relevant flood hazard and GIS data. In addition, information about the State NFIP Coordinator and GIS Coordinator is shown in this table. At the request of FEMA, each Governor has designated an agency of State or territorial government to coordinate that State's or territory's NFIP activities. These agencies often assist communities in developing and adopting necessary floodplain management measures. State GIS Coordinators are knowledgeable about the availability and location of State and local GIS data in their state.

Table 31: Additional Information

FEMA and the NFIP	
FEMA and FEMA Engineering Library website	www.fema.gov/national-flood-insurance-program-flood-hazard-mapping/engineering-library
NFIP website	www.fema.gov/national-flood-insurance-program
NFHL Dataset	msc.fema.gov
FEMA Region IV	Federal Emergency Management Agency 3003 Chamblee Tucker Road Atlanta, GA 30341
Other Federal Agencies	
USGS website	www.usgs.gov
Hydraulic Engineering Center website	www.hec.usace.army.mil
State Agencies and Organizations	
State NFIP Coordinator	Amy J. Miller Tennessee Emergency Management Agency 3041 Sidco Drive Nashville, TN 37204 (615) 532-6683 Amy.J.Miller@tn.gov
State GIS Coordinator	Dennis Pedersen, Division Director Office for Information Resources, GIS Services Tennessee Tower, 16 th Floor 312 8 th Avenue, North Nashville, TN 37243 (615) 741-9356 Dennis.Pedersen@tn.gov

SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES

Table 32 includes sources used in the preparation of and cited in this FIS Report as well as additional studies that have been conducted in the study area.

Table 32: Bibliography and References

Citation in this FIS	Publisher / Issuer	Publication Title, "Article," Volume, Number, etc.	Author / Editor	Place of Publication	Publication Date / Date of Issuance	Link
AAS 1992	Atlantic Aerial Surveys	Topographic Maps, Scale 1"=200', Contour Interval 2 Feet, prepared by photogrammetric methods from aerial photographs		Murfreesboro, Tennessee	March 1992	
Baker/AECOM 2014	Michael Baker International	"Hydraulic Analyses, Stones River Watershed, Tennessee" and "Hydrologic Analyses, Stones River Watershed, Tennessee"			April 2014	
FIS 1982	Federal Emergency Management Agency	Flood Insurance Study, Town of Smyrna, Rutherford County, Tennessee (470169V000)		Washington, D.C	September 16, 1982	
FIS 1983	Federal Emergency Management Agency	Flood Insurance Study, City of La Vergne, Rutherford County, Tennessee (470167V000)		Washington, D.C.	December 15, 1983	
FIS 1989	Federal Emergency Management Agency	Flood Insurance Study, Rutherford County, Tennessee, Unincorporated Areas (470165V000)		Washington, D.C	October 17, 1989	
FIS 1998	Federal Emergency Management Agency	Flood Insurance Study, Rutherford County Tennessee, and Incorporated Areas (47149CV000)		Washington, D.C	May 18, 1998	
FIS 1999	Federal Emergency Management Agency	Flood Insurance Study, Rutherford County Tennessee, and Incorporated Areas (47149CV000)		Washington, D.C	November 8, 1999	
FIS 2002a	Federal Emergency Management Agency	Flood Insurance Study, Metropolitan Government of Nashville and Davidson County, Tennessee, and Incorporated Areas (47037CV001A)		Washington, D.C	November 21, 2002	
FIS 2002b	Federal Emergency Management Agency	Flood Insurance Study, Rutherford County Tennessee, and Incorporated Areas (47149CV001A)		Washington, D.C	December 20, 2002	
FIS 2007	Federal Emergency Management Agency	Flood Insurance Study, Rutherford County Tennessee, and Incorporated Areas (47149CV001B)		Washington, D.C	January 5, 2007	

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher / Issuer	Publication Title, "Article," Volume, Number, etc.	Author / Editor	Place of Publication	Publication Date / Date of Issuance	Link
FIS 2008	Federal Emergency Management Agency	Flood Insurance Study, Rutherford County Tennessee, and Incorporated Areas (47149CV001C)		Washington, D.C	October 16, 2008	
LOMR 2003	Federal Emergency Management Agency	LOMR Case No. 03-04-559P for East Branch Hurricane Creek		Washington, D.C	December 29, 2003	
LOMR 2007a	Federal Emergency Management Agency	LOMR Case No. 07-04-2511P for Puckett Creek		Washington, D.C.	July 26, 2007	
LOMR 2007b	Federal Emergency Management Agency	LOMR Case No. 06-04-C283P for Overall Creek		Washington, D.C.	August 2, 2007	
LOMR 2009	Federal Emergency Management Agency	LOMR Case No. 09-04-3370P for Fall Creek		Washington, D.C.	November 12, 2009	
LOMR 2010a	Federal Emergency Management Agency	LOMR Case No. 09-04-0707P for Middle Fork Stones River and West Fork Stones River		Washington, D.C.	March 4, 2010	
LOMR 2010b	Federal Emergency Management Agency	LOMR Case No. 09-04-3567P for West Fork Stones River		Washington, D.C.	April 23, 2010	
LOMR 2010c	Federal Emergency Management Agency	LOMR Case No. 10-04-6789P for Unnamed Tributary 184		Washington, D.C.	August 31, 2010	
LOMR 2014	Federal Emergency Management Agency	LOMR Case No. 13-04-7742P for West Fork Stones River		Washington, D.C.	July 25, 2014	
PSI 2011	Photo Science Incorporated	DEM generated from 2011 LiDAR collected by Photo Science Inc.			2011	
SEC & JCE 2003a	Site Engineering Consultants, Inc. and James Civil Engineering	"East Fork Stones River Basin Study, East Fork Stones River and Bradley Creek"		Murfreesboro, Tennessee	November 2003	
SEC & JCE 2003b	Site Engineering Consultants, Inc. and James Civil Engineering	"Armstrong Branch Hydrologic Study"		Murfreesboro, Tennessee	December 2003	

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher / Issuer	Publication Title, "Article," Volume, Number, etc.	Author / Editor	Place of Publication	Publication Date / Date of Issuance	Link
USACE 1974	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-2, "Floodway Determination Using Computer Program HEC-2", Training Document No. 5		Davis, California	May 1974	
USACE 1976	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-2, Computation of Water Surface Profiles, Users Manual of HEC-2 Computer Program 723X6L202A		Davis, California	November 1976	
USACE 1984	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-1, Flood Hydrograph Package		Davis, California	January 1984	
USACE 1985	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-2, Computation of Water Surface Profiles, Users Manual of HEC-2 Computer Program 723X6L202A		Davis, California	August 1985	
USACE 1991	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-2 4.6.2, Water Surface Profiles Program, Version 4.6.2		Davis, California	May 1991	
USACE 1997	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-RAS 2.0, River Analysis System, Version 2.0, Computer Software		Davis, California	April 1997	
USACE 2002a	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-HMS 2.2.1, Hydrologic Modeling System, Version 2.2.1		Davis, California	October 2002	
USACE 2002b	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-RAS 3.1.0, River Analysis System, Version 3.1.0, Computer Software		Davis, California	November 2002	
USACE 2004	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-RAS 3.1.2, River Analysis System, Version 3.1.2, Computer Software		Davis, California	April 2004	
USACE 2005	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-RAS 3.1.3, River Analysis System, Version 3.1.3, Computer Software		Davis, California	May 2005	
USACE 2008	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-RAS 4.0.0, River Analysis System, Version 4.0.0, Computer Software		Davis, California	March 2008	

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher / Issuer	Publication Title, "Article," Volume, Number, etc.	Author / Editor	Place of Publication	Publication Date / Date of Issuance	Link
USACE 2010a	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-RAS 4.1.0, River Analysis System, Version 4.1.0, Computer Software		Davis, California	January 2010	
USACE 2010b	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-RAS 3.5.0, River Analysis System, Version 3.5.0, Computer Software		Davis, California	August 2010	
USACE 2013	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-HMS 4.0 Hydrologic Modeling System, Version 4.0		Davis, California	December 2013	
USACE 2015	U.S. Army Corps of Engineers, Nashville District	"Metro Nashville PAS - Phase 4B Flood Insurance Update"		Nashville, Tennessee	July 2015	
USACE 2016	U.S. Army Corps of Engineers, Nashville District	"Harpeth River Watershed Flood Insurance Update"		Nashville, Tennessee	April 2016	
USACE 2019	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-RAS 5.0.7, River Analysis System, Version 5.0.7, Computer Software		Davis, California	March 2019	
USGS 1976	U.S. Department of the Interior, Geological Survey	"Techniques for Estimating Magnitude and Frequency of Floods in Tennessee"		Washington, D.C.	1976	
USGS 1984	U.S. Geological Survey, for Tennessee Department of Transportation	"Synthesized Flood Frequency for small Urban Streams in Tennessee" Water-Resources Investigations Report 84-4182	C. Robbins		1984	
USGS 1993	U.S. Department of the Interior, Geological Survey	"Nationwide Summary of USGS Regional Regression Equations for Estimating Magnitude and Frequency of Floods for Ungagged Sites", USGS Water Resources Investigations Report 94-4002		Reston, Virginia	1993	

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher / Issuer	Publication Title, "Article," Volume, Number, etc.	Author / Editor	Place of Publication	Publication Date / Date of Issuance	Link
USGS 2000	U.S. Department of the Interior, Geological Survey	"Flood-Frequency Prediction Methods for Unregulated Streams of Tennessee, 2000", Water-Resources Investigations Report 03-4176, WIR 03-4176			2000	http://pubs.usgs.gov/wri/wri034176/PDF/wrir034176.pdf
USGS 2002	U.S. Department of the Interior, Geological Survey	"Estimating Magnitude and Frequency of Floods in Rural Basins of Tennessee", Water-Resources Investigations Report 02-		Nashville, Tennessee	2002	
Woolpert 2018	Woolpert Inc.	LiDAR data to be collected at a nominal pulse spacing (NPS) of 0.162 meters. The final products include classified LAS, 2.5 feet pixel raster DEMs of the bare-earth surface in ERDAS IMG Format, and Intensity data in TIFF format. Tiled data was delivered in 4,000ft x 7,000ft tiles.			2018	