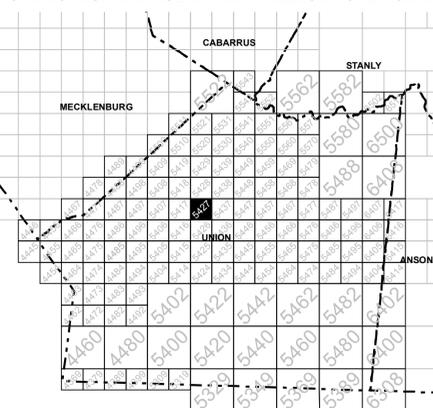


STATE OF NORTH CAROLINA FIRM PANEL LOCATOR DIAGRAM



DATUM INFORMATION

The projection used in the preparation of this map was the North Carolina State Plane (FIPSZONE 3200). The horizontal datum was the North American Datum of 1983, GRS80 ellipsoid. Differences in datum, ellipsoid, projection, or Universal Transverse Mercator zones used in the production of FIRMS for adjacent jurisdictions may result in slight positional differences in map features across jurisdictional boundaries. These differences do not affect the accuracy of this FIRM. All coordinates on this map are in U.S. Survey Feet, where 1 U.S. Survey Foot = 1200/9937 Meters.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988 (NAVD 88). These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. An average offset between NAVD 88 and the National Geodetic Vertical Datum of 1929 (NGVD 29) has been computed for each North Carolina county. This offset was then applied to the NGVD 29 flood elevations that were not revised during the creation of this statewide format FIRM. The offsets for each county shown on this FIRM panel are shown in the vertical datum offset table below. Where a county boundary and a flooding source with unrevised NGVD 29 flood elevations are coincident, an individual offset has been calculated and applied during the creation of this statewide format FIRM. See Section 6.1 of the accompanying Flood Insurance Study report to obtain further information on the conversion of elevations between NAVD 88 and NGVD 29. To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the North Carolina Geodetic Survey at the address shown below. You may also contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

County	Average Vertical Datum Offset (m)
UNION	-0.78

Example: NAVD 88 = NGVD 29 + (-0.78)

All streams listed in the Flood Hazard Data Table below were studied by detailed methods using field survey. Other flood hazard data shown on this map may have been derived using either a coastal analysis or limited detailed riverine analysis. More information on the flooding sources studied by these analyses is contained in the Flood Insurance Study report.

Cross Section	Stream Station ¹	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Floodway Width (feet) Left/Right Distance From the Center of Stream to Encroachment Boundary (Looking Downstream) or Total Floodway Width
STEWARTS CREEK				
445	44,466	NA	547.5	192
451	45,051	NA	548.5	281
456	45,553	NA	549.5	126
460	46,013	NA	550.9	230
466	46,558	NA	552.3	135
470	47,002	NA	553.7	113
476	47,620	NA	555.9	124
481	48,097	NA	557.7	70
486	48,563	NA	559.4	80
492	49,222	NA	561.8	99
499	49,893	NA	565.9	65
500	50,015	NA	570.7	120
506	50,618	NA	571.2	97
513	51,252	NA	573.2	84
517	51,733	NA	576.0	101
523	52,262	NA	578.0	62
528	52,844	NA	580.6	70
535	53,522	NA	585.8	71
542	54,150	NA	590.6	80
548	54,786	NA	594.6	95
554	55,399	NA	598.2	75
558	55,755	NA	599.8	85
558	55,835	NA	606.2	110
564	56,392	NA	606.6	66
569	56,930	NA	608.4	64
574	57,408	NA	610.5	109
580	57,993	NA	612.5	110
583	58,313	NA	614.2	76
590	58,992	NA	619.2	110
591	59,069	NA	624.2	147

¹ Feet above confluence with Richardson Creek

¹ Feet above confluence with Richardson Creek



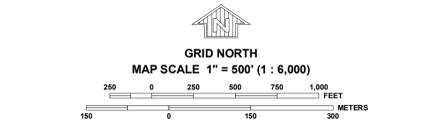
This digital Flood Insurance Rate Map (FIRM) was produced through a unique cooperative partnership between the State of North Carolina and the Federal Emergency Management Agency (FEMA). The State of North Carolina has implemented a long term approach of floodplain management to decrease the costs associated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

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LEGEND

- SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT
The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.
- ZONE A** No Base Flood Elevation determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance flood.
- ZONE A99** Areas to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.
- FLOODWAY AREAS IN ZONE AE
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
- OTHER FLOOD AREAS
ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
OTHER AREAS Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D Areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS
- OTHERWISE PROTECTED AREAS (OPAs)
CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and value; elevation in feet*
* Referenced to the North American Vertical Datum of 1988
- Flood Elevation value where uniform within zone; elevation in feet*
- Cross section line
- Transect line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 1000-meter Universal Transverse Mercator grid ticks, zone 17
- 2500-foot grid values; North Carolina State Plane coordinate system (FIPSZONE 3200, State Plane NAD 83 feet)
- North Carolina Geodetic Survey bench mark (for more information visit <http://www.ncgs.state.nc.us>)
- National Geodetic Survey bench mark (for more information visit <http://www.ngs.noaa.gov>)
- NGS-58 GPS 2.5 cm Vertical Control Marks or Contractor-Established NCPMP Bench Marks (for more information visit <http://www.ncgs.state.nc.us>)
- River Mile



PANEL 5427J

FIRM

FLOOD INSURANCE RATE MAP

NORTH CAROLINA

PANEL 5427
(SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	CID No.	PANEL SUFFIX
INDIAN TRAIL TOWN OF	370235	5427 J
MONROE CITY OF	370236	5427 J
UNION COUNTY	370234	5427 J
UNIONVILLE TOWN OF	370684	5427 J

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 4.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, users are encouraged to consult the Flood Profiles, Floodway Data, Limited Detailed Flood Hazard Data, and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels, community map repository addresses, and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Boundaries of regulatory floodways shown on the FIRM for flooding sources studied by detailed methods were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data for flooding sources studied by detailed methods as well as non-encroachment widths for flooding sources studied by limited detailed methods are provided in the Flood Insurance Study (FIS) report for this jurisdiction. The FIS report also provides instructions for determining a floodway using non-encroachment widths for flooding sources studied by limited detailed methods.

This map may contain roads that were not considered in the hydraulic analysis of streams where no new hydraulic model was created during the production of this statewide format FIRM.

If you have questions about this map or questions concerning the National Flood Insurance Program in general, please call 1 - 877 - FEMA MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov>.

An accompanying Flood Insurance Study report, Letter of Map Revision (LOMR) or Letter of Map Amendment (LOMA) revising portions of this panel, and digital versions of this FIRM may be available. Visit the North Carolina Floodplain Mapping Program website at <http://www.ncfloodmaps.com>, or contact the FEMA Map Service Center at 1-800-358-9616 for information on all related products associated with this FIRM. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at <http://www.msc.fema.gov>.

For community map revision history prior to statewide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent, the North Carolina Division of Emergency Management or the National Flood Insurance Program at the following phone numbers or websites.

NC Division of Emergency Management (919) 715-8000 <http://www.ncdcmcontrol.org>

National Flood Insurance Program 1-800-638-6620 <http://www.fema.gov/business/nfp/>

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index or visit <http://www.ncfloodmaps.com>.

EFFECTIVE DATE OF FLOOD INSURANCE RATE MAP PANEL

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

PRELIMINARY
JUN 28 2007

EFFECTIVE DATE MAP NUMBER
3710542700J

State of North Carolina
Federal Emergency Management Agency