



Limited Detail Study

Background

The Georgia Flood Map Modernization Program features Special Flood Hazard Areas (SFHAs) studied by Limited Detail Study methods. Limited Detail Study has been widely used in Federal Emergency Management Agency (FEMA) Flood Insurance Studies (FIS), but, until now, has not been commonly used in the State of Georgia. This document describes Limited Detail Study, and how this information impacts community floodplain management officials and the public.

What is a Limited Detail Study?

Limited Detail Study is a type of approximate flood study, and is posted on the Flood Insurance Rate Map (FIRM) for the community as “Zone A.” Limited Detail Study, like traditional Zone A study, produces a 1% annual chance (100-year) floodplain delineation, but also produces an estimated 1% annual chance (100-year) flood elevation or Base Flood Elevation (BFE) for use by the community. Limited Detail Study is less rigorous and does not include field surveying of bridges, culverts, or channel cross-sections, and thus is more approximate in nature than full detailed flood study. Users must be aware of this caveat and utilize the data with appropriate freeboard or other factors of safety. Community officials are provided engineering backup data and flood profiles in a separate report called *Flood Profiles for Streams Studied by Limited Detailed Methods* that may be used to estimate a 1% annual chance base flood elevation along flooding sources studied by Limited Detail methods.

How do the Approximate Method, Limited Detailed Study Method, and Detailed Study Method compare?

Approximate Methods	Limited Detailed Study Methods	Detailed Study Methods
Zone A	Zone A	Zone AE
No BFE Established, No Floodway Delineated	Estimated BFE Established, No Floodway Delineated	BFE Established and Floodway Delineated
No Field Surveys Done	No Field Surveys Done	Field Survey Done, Including Channel Bathymetric Profiles, Bridge & Culvert Geometry, and Floodplain Characteristics
USGS Topographic Quadrangles, Flood-prone Quadrangles, or Hydric Soils Maps Used, No Channel Cross-Sections Used	Digital Elevation Models (DEM) from Light Detection and Ranging (LIDAR) Data Used for Channel Cross-Sections	Field Survey Data, DEM, and LIDAR Data Used for Channel Cross-Sections
No Standard Hydrologic and Hydraulic Methods Used	Standard Hydrologic and Hydraulic Methods Used	Standard Hydrologic and Hydraulic Methods Used
No BFE Established	Estimated BFE Data in the <i>Flood Profiles for Streams Studied by Limited Detailed Methods Report</i> ; the River Station as Distance from Downstream Beginning Point of Study Provided on DFIRM	BFE and Location of Cross-Sections on the DFIRM & FIS Report

How do Limited Detail SFHA impact floodplain management standards?

Communities that have adopted the model Georgia Flood Damage Prevention Ordinance, which requires development 3 feet above the highest adjacent grade in unnumbered A Zones, will instead need to require elevation of the structures one foot above the estimated BFE in A Zone areas where a Limited Detail Study has been completed.

What are insurance rates in Limited Detail SFHAs?

Insurance rates within limited detail SFHAs are treated as Zone A areas with estimated BFEs for insurance purposes. The chart below shows the significant reduction in flood insurance rates for the same type of structure with and without limited detail flood study information available.

Note: These rates are effective May 1, 2005

Unnumbered Zone A – Without Basement/Enclosure					
Elevation Difference to nearest foot	BUILDING RATES		CONTENT RATES		Type of Elevation Certificate
	Occupancy		Occupancy		
	1-4 Family	Other & Non-residential	Residential	Non-residential	
+5 or more	.36 / .10	.48 / .15	.62 / .12	.65 / .12	NO ESTIMATED BASE FLOOD ELEVATION
+2 to +4	.80 / .12	.83 / .20	.82 / .17	.89 / .23	
+1	1.56 / .56	1.76 / .75	1.40 / .63	1.33 / .72	
0 or Below	Submit to Rate	Submit to Rate	Submit to Rate	Submit to Rate	
+2 or more	.32 / .08	.34 / .08	.50 / .12	.49 / .12	WITH ESTIMATED BASE FLOOD ELEVATION
0 to +1	.77 / .10	.67 / .17	.72 / .15	.76 / .21	
-1	2.50 / .93	3.17 / 1.02	2.08 / .67	1.84 / 1.02	
-2 or below	Submit to Rate	Submit to Rate	Submit to Rate	Submit to Rate	
No Elevation Certificate	2.93 / 1.20	3.96 / 1.70	2.61 / 1.00	2.74 / 1.35	No Elevation Certificate

Are there other benefits of a Limited Detailed Study Method?

A Limited Detailed Study is a “buildable” product that can be upgraded to a fully detailed study at a later date by verifying stream channel characteristics, bridge and culvert opening geometry, and by analyzing multiple recurrence intervals.

Example: Limited Detailed Study Map

