

Map Notes: The [FEMA Digital Q3 Flood Data](#) displayed on this Web site is developed by scanning the existing Flood Insurance Rate Map (FIRM) hardcopy and capturing a thematic overlay of flood risks. Digital Q3 Flood Data files contain only certain features from the FIRM hardcopy in effect at the time of scanning and do not replace the existing FIRM hardcopy maps. The Q3 Flood Data is being displayed here with basemap data from the GDT Dynamap/2000 data set. The Q3 Flood Data is currently available for approximately [1,200 counties](#) across the United States.

The maps displayed on this site should be considered an advisory tool for general hazard awareness, education, and flood plain management. The flood hazard maps displayed on this site **are not the legal document** to be used when making a single site flood hazard determination. For more information on these maps, please refer to the [Frequently Asked Questions](#) page.

**Figure 16. Flood hazard area for the Memphis, Tennessee area brought up on the ESRI Web site for hazard maps. The conditions for use are stated in the Map Notes (<http://www.esri.com/hazards/makemap.html>).**

*Figure 16: Flood hazard area for the Memphis, Tennessee area.*

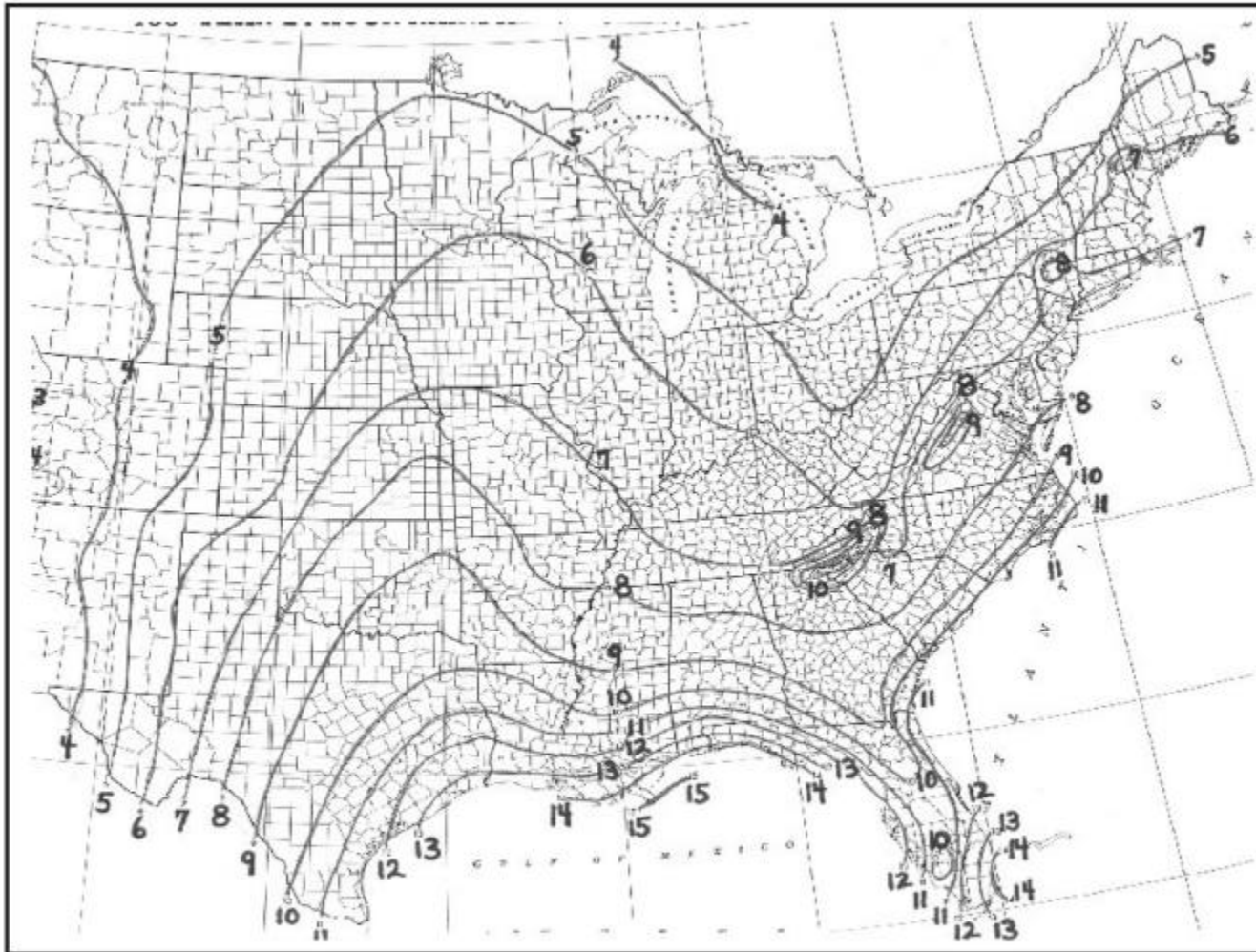


Figure 17. 100 year return period, 24 hour rainfall in inches. If 8 inches is the amount of rain needed for strong headwater flooding, this contour line may be followed to identify risk areas with lower return periods (<http://www.publicaffairs.noaa.gov/releases2000/dec00/noaa00084.html>).

*Figure 17: 100 year return period, 24 hour rainfall in inches*

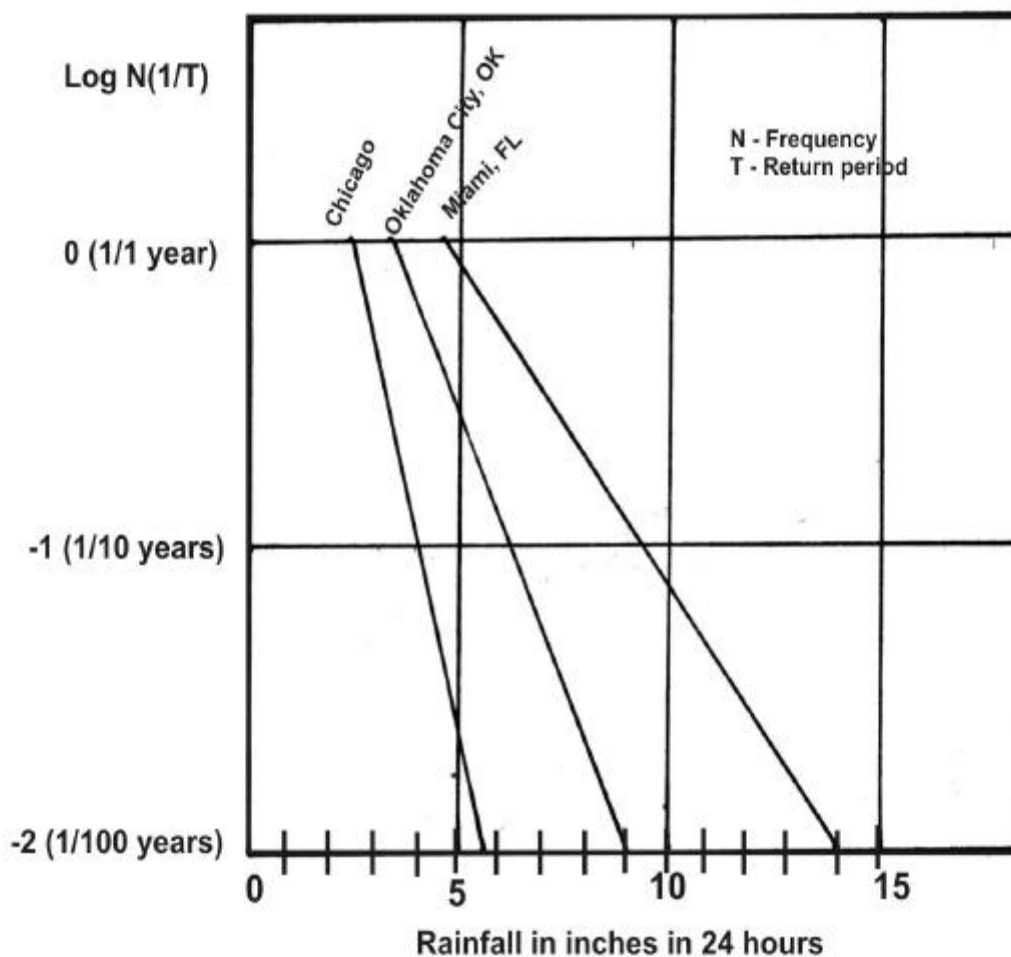


Figure 18. Frequency of occurrence versus rainfall in 24 hours for selected cities (no reference).

Figure 18: Frequency of occurrence versus rainfall in 24 hours for selected cities

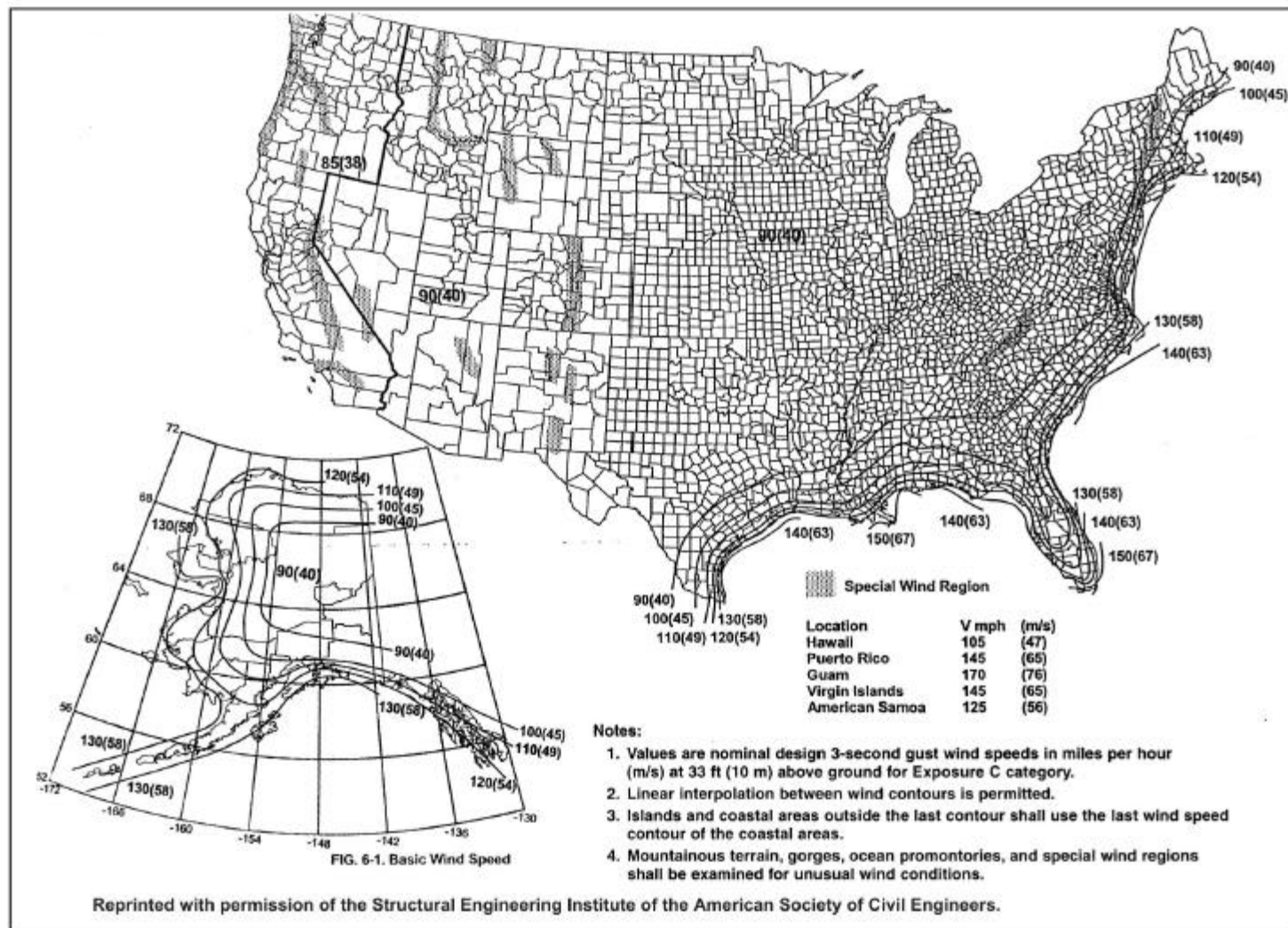
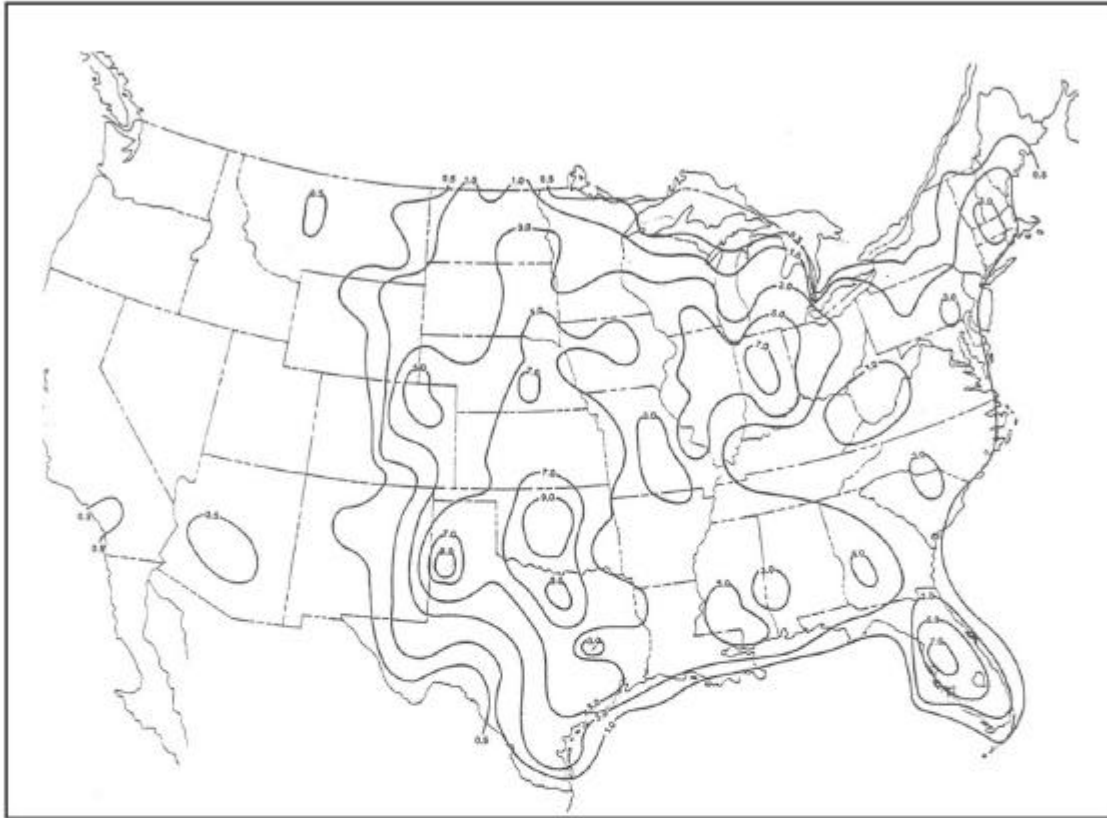


Figure 19. American Society of Civil Engineers' 50 year return period wind map for severe wind and hurricane wind gusts (1999) (Minimum Design Loads for Buildings and Other Structures, ANSI/ASCE 7-98).

Figure 19: American Society of Civil Engineers 50 year return period wind map for severe wind and hurricane wind gusts, 1999



**Figure 20. Average annual tornado incidence per 10,000 square miles 1953-1980.** (70% are weak events. The tornado concentration in central Florida is shown as comparable to that in Indiana and much of Oklahoma, and exceeds that in Mississippi. This is due to the large number of weak tornadoes that touch down in Florida and are counted. The true "risk" from tornadoes in Florida is lower than that in Mississippi, Arkansas, South Dakota, and many other states, despite what the numbers on this map indicate.) (Significant Tornadoes 1680-1991, Thomas P. Grazulis, 1993)

*Figure 20: Average annual tornado incidence per 10,000 square miles, 1953-1980.*



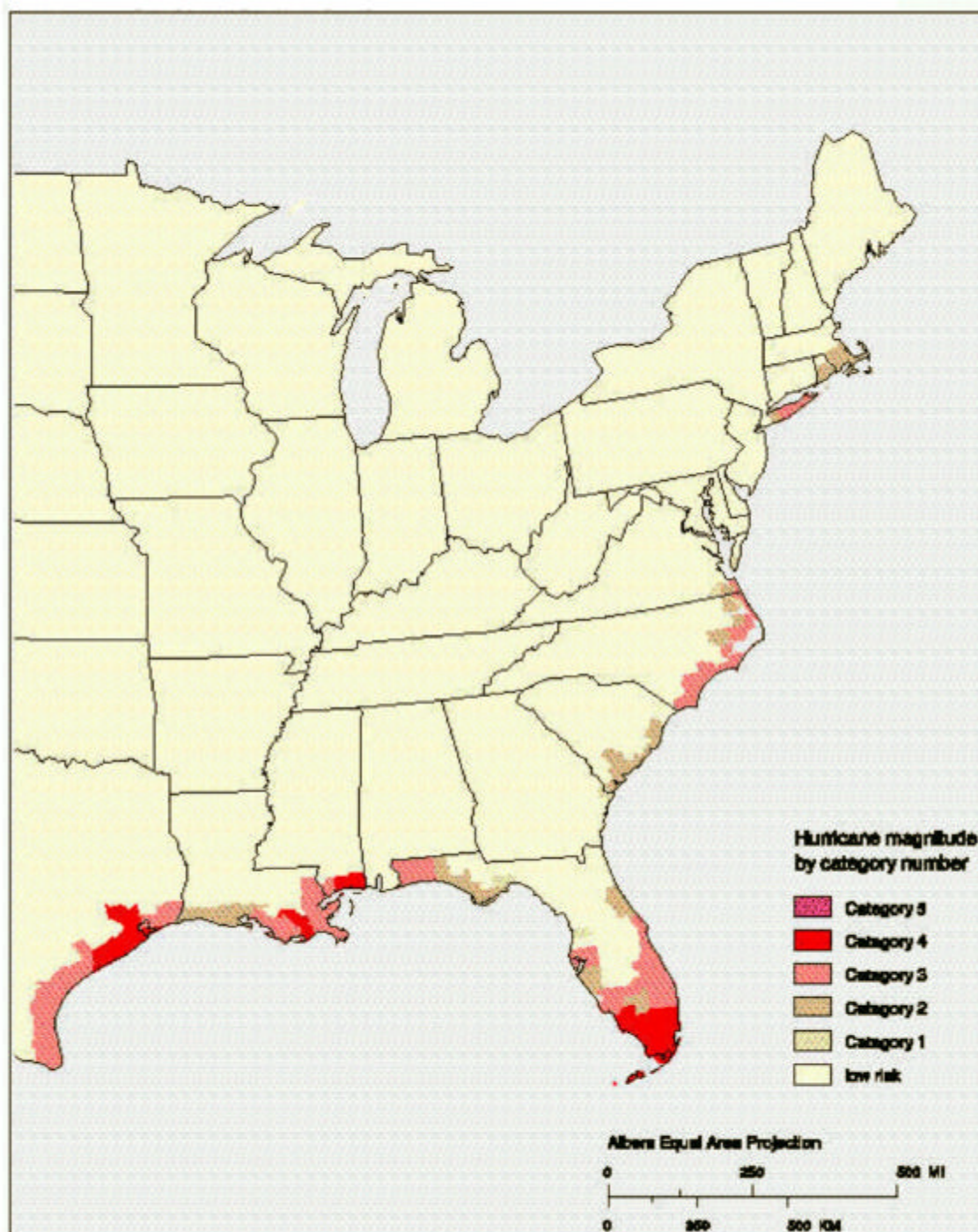


Figure 21. Coastal counties from Texas to Maine and the 5% chance associated with the occurrence of landfalling hurricane magnitude (by category) being equaled or exceeded in any given year (Source: Data compiled from U.S. Department of Commerce, 1994, <http://www.fema.gov/hu97/humag.htm>).

Figure 21: Coastal counties from Texas to Maine and the 5% chance associated with the occurrence of landfalling hurricane magnitude (by category) being equaled or exceeded in any given year