

Summerville, SC USACE Debris Estimation Model

Storm Categories	Category 1	74-95 MPH Winds
	Category 2	96-110 MPH Winds
	Category 3	111-130 MPH Winds
	Category 4	131-155 MPH Winds
	Category 5	155+ MPH Winds

Estimated Debris Quantities

Summerville, SC				Category 1	Category 2	Category 3	Category 4	Category 5
Population	50,730		H	19,894	19,894	19,894	19,894	19,894
Category Factor			C	2	8	26	50	80
Vegetation			V	1.3	1.3	1.3	1.3	1.3
Commercial Density			B	1.2	1.2	1.2	1.2	1.2
Precipitation			S	1.3	1.3	1.3	1.3	1.3
Q= H(C)(V)(B)(S)			Cubic Yards	80,691	322,762	1,048,977	2,017,264	3,227,622

Temporary Debris Management Site Requirements

1 Acre (ac)		4840						
10 Feet stack height		3.3						
Total volume per acre		16,147						
Q=H(C)(V)(B)(S)			Cubic Yards	80,691	322,762	1,048,977	2,017,264	3,227,622
Acres Required			Acres	5	20	65	125	200