

Appendix C DEBRIS ESTIMATE MODELS

**Table C-1
Category 1**

Debris Volume Estimate Report	
City of New Orleans Louisiana	
Category 1 Estimate	
<u>Cubic Yardage Estimate</u>	
Estimated 2007 Households	150,000
Storm Category	1
Vegetation Characteristic	Medium
Commercial/Industrial Density	Medium
Storm Precipitation Characteristic	Heavy
<p>Q = H (C)(V)(B)(S) where:</p> <p>Q = quantity of debris in cubic yards = 610,000</p> <p>H = number of households = 150,000</p> <p>C = storm category factor in cubic yards = 2</p> <p>V = vegetation characteristic multiplier = 1.30</p> <p>B = commercial/business/industrial multiplier = 1.20</p> <p>S = storm precipitation characteristic multiplier = 1.30</p>	
Clean Woody Debris	549,000
Mixed C&D Debris	61,000
Total Debris	610,000
<u>Debris Storage Site Requirements</u>	
AC	One Acre
20	Foot Stack Height
	Volume Per Acre
	4,840.00 Square Yards (SY)
	6.67 Yards
	32,267 CY/AC
	Total Debris Estimate 610,000
	Debris Storage Requirement 18.90 AC
	Road and Buffer Factor 1.66
	Estimated Storage Requirements 31.38 ACRES
<p><u>Notes:</u></p> <p>[1] Source: USACE Hurricane Debris Estimating Model.</p> <p>[2] Monitoring costs (including the administration of an extensive ROE program) estimated at 20% of total debris collection cost.</p>	

Table C-2
Category 2

Debris Volume Estimate Report		
City of New Orleans Louisiana		
Category 2 Estimate		
<u>Cubic Yardage Estimate</u>		
Estimated 2007 Households	150,000	
Storm Category	2	
Vegetation Characteristic	Medium	
Commercial/Industrial Density	Medium	
Storm Precipitation Characteristic	Heavy	
Q = H (C)(V)(B)(S) where:		
Q =	quantity of debris in cubic yards = 2,430,000	
H =	number of households = 150,000	
C =	storm category factor in cubic yards = 8	
V =	vegetation characteristic multiplier = 1.30	
B =	commercial/business/industrial multiplier = 1.20	
S =	storm precipitation characteristic multiplier = 1.30	
Clean Woody Debris	1,944,000	
Mixed C&D Debris	486,000	
Total Debris	2,430,000	
<u>Debris Storage Site Requirements</u>		
AC	One Acre	4,840.00 Square Yards (SY)
20	Foot Stack Height	6.67 Yards
	Volume Per Acre	32,267 CY/AC
	Total Debris Estimate	2,430,000
	Debris Storage Requirement	75.31 AC
	Road and Buffer Factor	1.66
	Estimated Storage Requirements	125.01 ACRES
<u>Notes:</u>		
[1] Source: USACE Hurricane Debris Estimating Model.		
[2] Monitoring costs (including the administration of an extensive ROE program) estimated at 20% of total debris collection cost.		

Table C-3
Category 3

Debris Volume Estimate Report		
City of New Orleans Louisiana		
Category 3 Estimate		
<u>Cubic Yardage Estimate</u>		
Estimated 2007 Households	150,000	
Storm Category	3	
Vegetation Characteristic	Medium	
Commercial/Industrial Density	Medium	
Storm Precipitation Characteristic	Heavy	
Q = H (C)(V)(B)(S) where:		
Q = quantity of debris in cubic yards	7,910,000	
H = number of households	= 150,000	
C = storm category factor in cubic yards	= 26	
V = vegetation characteristic multiplier	= 1.30	
B = commercial/business/industrial multiplier	= 1.20	
S = storm precipitation characteristic multiplier	= 1.30	
Clean Woody Debris	4,746,000	
Mixed C&D Debris	3,164,000	
Total Debris	7,910,000	
<u>Debris Storage Site Requirements</u>		
AC	One Acre	4,840.00 Square Yards (SY)
20	Foot Stack Height	6.67 Yards
	Volume Per Acre	32,267 CY/AC
	Total Debris Estimate	7,910,000
	Debris Storage Requirement	245.14 AC
	Road and Buffer Factor	1.66
	Estimated Storage Requirements	406.94 ACRES
<u>Notes:</u>		
[1] Source: USACE Hurricane Debris Estimating Model.		
[2] Monitoring costs (including the administration of an extensive ROE program) estimated at 20% of total debris collection cost.		

Table C-4
Category 4

Debris Volume Estimate Report		
City of New Orleans Louisiana		
Category 4 Estimate		
<u>Cubic Yardage Estimate</u>		
Estimated 2007 Households	150,000	
Storm Category	4	
Vegetation Characteristic	Medium	
Commercial/Industrial Density	Medium	
Storm Precipitation Characteristic	Heavy	
Q = H (C)(V)(B)(S) where:		
Q = quantity of debris in cubic yards	15,210,000	
H = number of households	= 150,000	
C = storm category factor in cubic yards	= 50	
V = vegetation characteristic multiplier	= 1.30	
B = commercial/business/industrial multiplier	= 1.20	
S = storm precipitation characteristic multiplier	= 1.30	
Clean Woody Debris	5,323,500	
Mixed C&D Debris	9,886,500	
Total Debris	15,210,000	
<u>Debris Storage Site Requirements</u>		
AC	One Acre	4,840.00 Square Yards (SY)
20	Foot Stack Height	6.67 Yards
	Volume Per Acre	32,267 CY/AC
	Total Debris Estimate	15,210,000
	Debris Storage Requirement	471.38 AC
	Road and Buffer Factor	1.66
	Estimated Storage Requirements	782.50 ACRES
<u>Notes:</u>		
[1] Source: USACE Hurricane Debris Estimating Model.		
[2] Monitoring costs (including the administration of an extensive ROE program) estimated at 20% of total debris collection cost.		

Table C-5
Category 5

Debris Volume Estimate Report		
City of New Orleans Louisiana		
Category 5 Estimate		
<u>Cubic Yardage Estimate</u>		
Estimated 2007 Households	150,000	
Storm Category	5	
Vegetation Characteristic	Medium	
Commercial/Industrial Density	Medium	
Storm Precipitation Characteristic	Heavy	
Q = H (C)(V)(B)(S) where:		
Q = quantity of debris in cubic yards	24,340,000	
H = number of households	= 150,000	
C = storm category factor in cubic yards	= 80	
V = vegetation characteristic multiplier	= 1.30	
B = commercial/business/industrial multiplier	= 1.20	
S = storm precipitation characteristic multiplier	= 1.30	
Clean Woody Debris	8,519,000	
Mixed C&D Debris	15,821,000	
Total Debris	24,340,000	
<u>Debris Storage Site Requirements</u>		
AC	One Acre	4,840.00 Square Yards (SY)
20	Foot Stack Height	6.67 Yards
	Volume Per Acre	32,267 CY/AC
	Total Debris Estimate	24,340,000
	Debris Storage Requirement	754.34 AC
	Road and Buffer Factor	1.66
	Estimated Storage Requirements	1,252.20 ACRES
<u>Notes:</u>		
[1] Source: USACE Hurricane Debris Estimating Model.		
[2] Monitoring costs (including the administration of an extensive ROE program) estimated at 20% of total debris collection cost.		