



# STORM DAMAGE REPORT JANUARY 2012 TORNADOES



Prepared by the  
Alabama Forestry Commission  
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The storms that went through Alabama on January 23, 2012, spawned several tornadoes that left many homes and businesses in ruins and also damaged forests in four counties in Alabama. These tornadoes exhibited typical patterns where timber damage along the tornado's paths were intermittent and sporadically located. Figures 1-3 show the paths of the tornados on state and local maps. The Alabama Forestry Commission estimates that the tornadoes impacted approximately **6,620** acres of forest land with damages of **\$3,094,480** (Table 1).

## Survey Procedures:

The Alabama Forestry Commission began aerial assessments of the damaged areas the day following the storms. The initial areas inspected were based upon National Weather Service information that identified the geospatial locations for possible tornado touchdowns. Alabama Forestry Commission pilots and experienced observers flew over these tracks to survey and map the damaged areas. These flights were completed within ten days of the storms.

**Forest acre estimates** were derived by using GIS analysis to overlay the damaged areas onto the National Land Cover Data (NLCD) to determine the specific forest land areas impacted within the tornado path.

**Timber volumes estimates** were derived using US Forest Service – Forest Inventory and Analysis (FIA) survey data. These per acre volumes for merchantable timber were calculated for each county and then applied to the acres damaged in the county. Volumes were adjusted based on observations of percent of the forest damage recorded during the aerial reconnaissance.

**Timber values estimates** were obtained using the 2011 third quarter average per unit stumpage price reported from Timber-Mart South<sup>®</sup> (latest available data).

**Table 1: Estimated Forest Damage from January 2012 Tornadoes**

County	Forest Acres Damaged	Percent Forest Damage	Damaged Timber Volume (tons)	Damaged Timber Value
Chilton	4,185	40	90,721	\$1,554,558
Jefferson	367	40	11,000	\$207,039
Perry	2,058	60	75,443	\$1,320,495
Tuscaloosa	10	100	678	\$12,388
<b>TOTALS</b>	<b>6,620</b>		<b>177,842</b>	<b>\$3,094,480</b>

Figure 1.

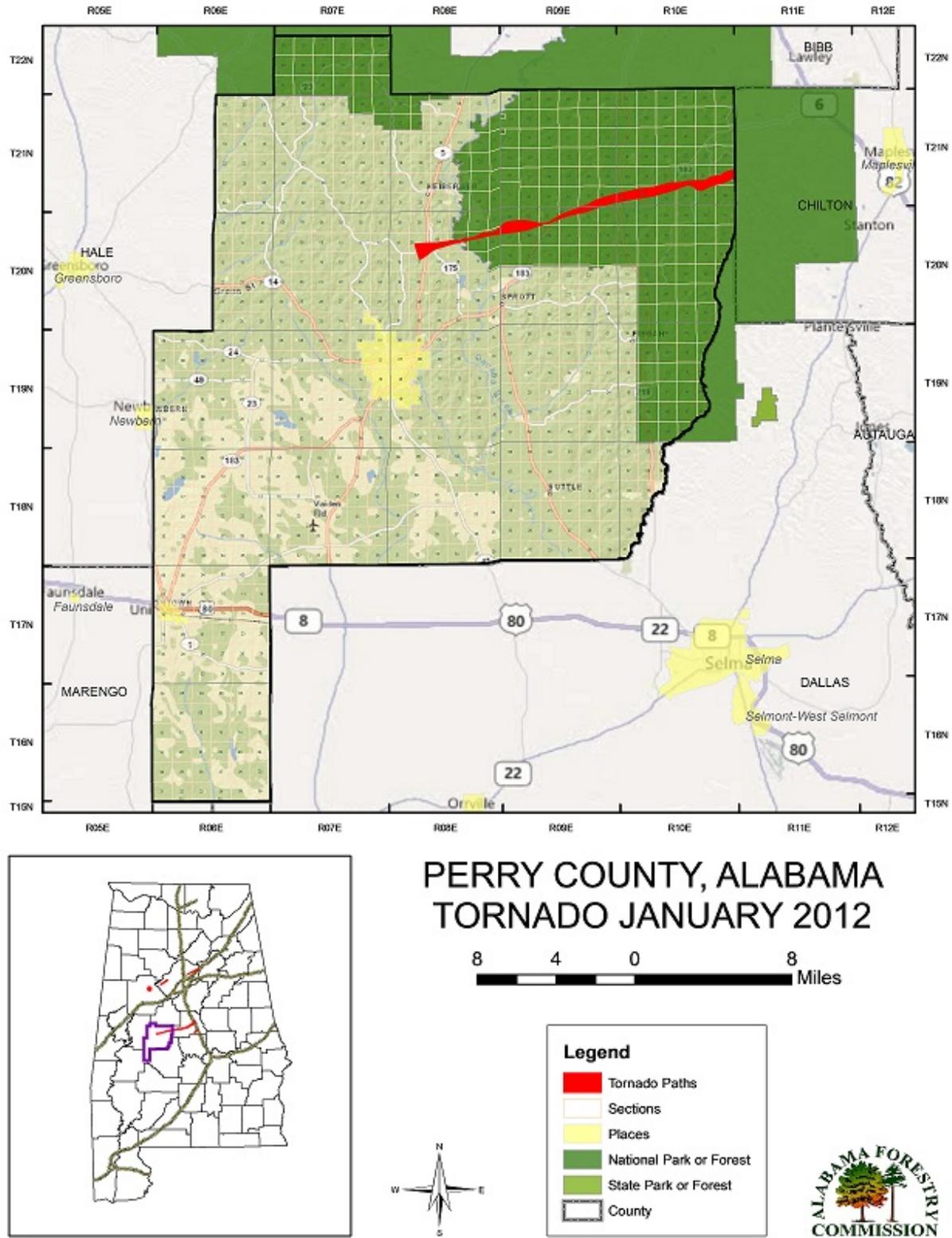


Figure 2.

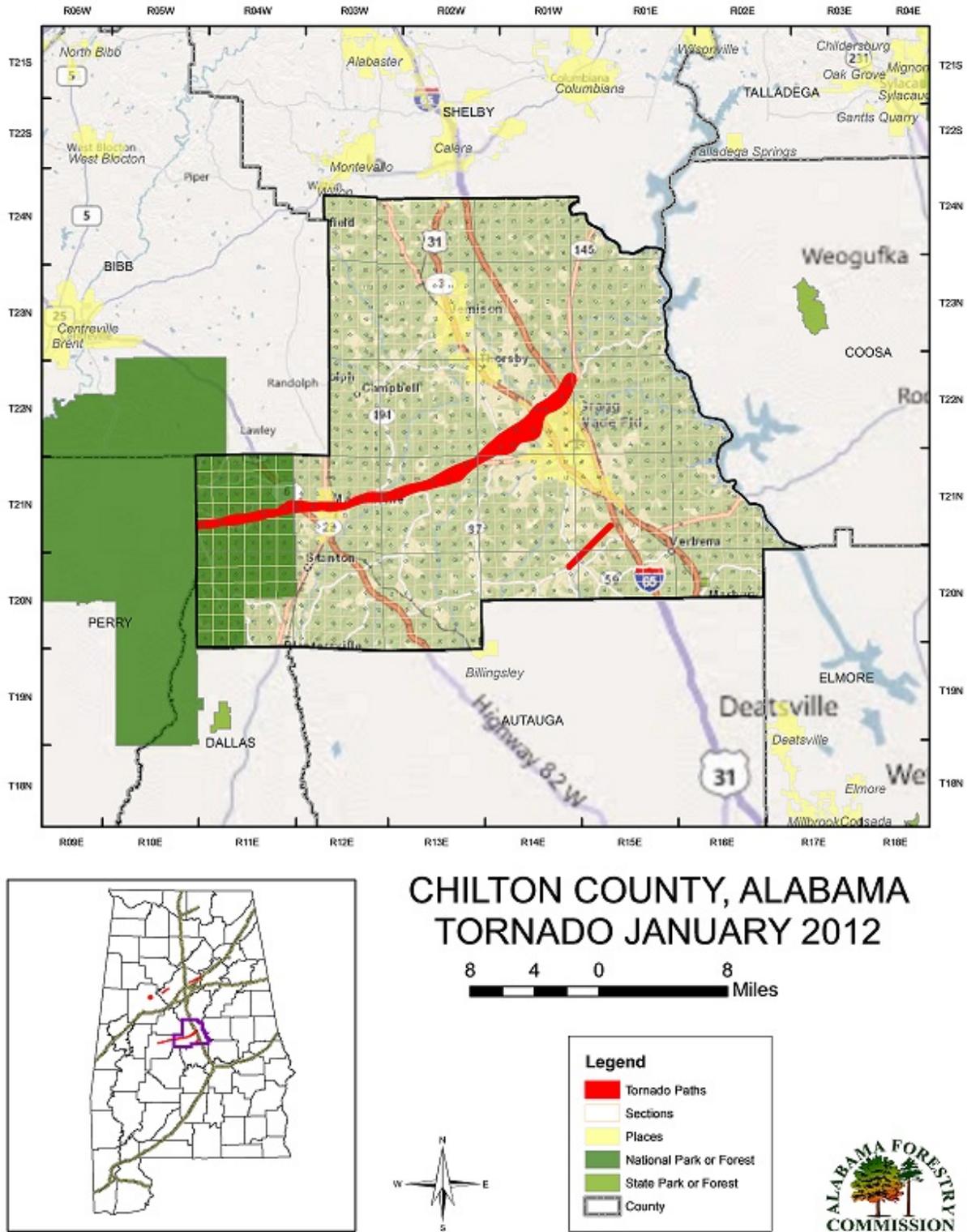


Figure 3.

