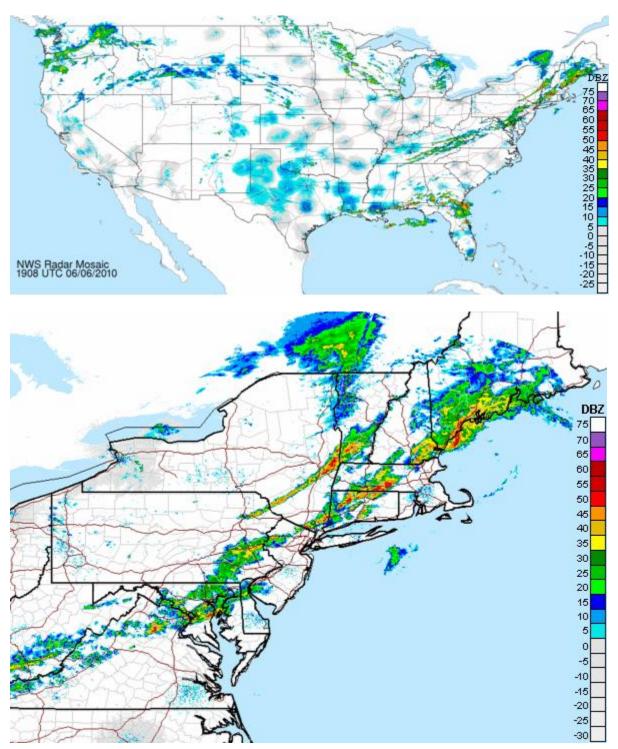
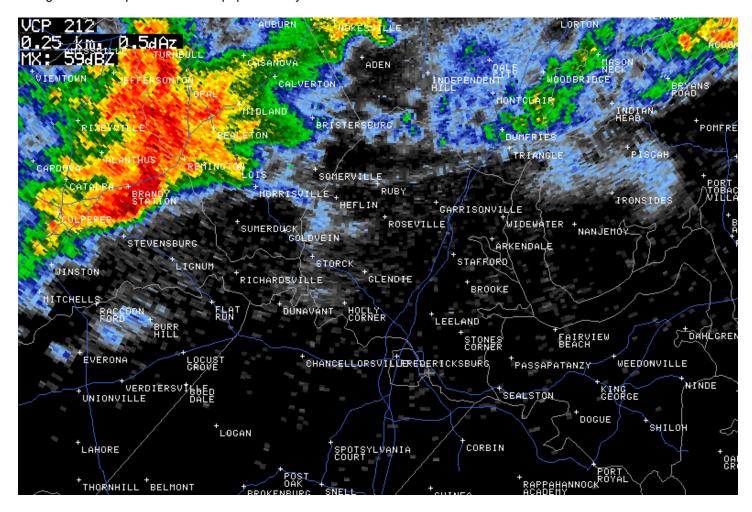
...Trees Downed Near Quantico Virginia...

On Sunday June 6th, 2010, the National Weather Service dispatched a storm survey team to Arkendale, Virginia in northeastern Stafford County to inspect thunderstorm damage to the area. On that day, a cold front was moving southeast across the region, lifting the hot and humid air over the incoming cooler air moving down from the Great Lakes region. Due to atmospheric conditions – including the hot, humid air and certain wind conditions through the first 10,000 feet of the atmosphere – forecasters were concerned about tornados and severe thunderstorms and therefore issued a tornado watch just after noon. That cold front sparked showers and thunderstorms that moved southeast across the mid-Atlantic region.



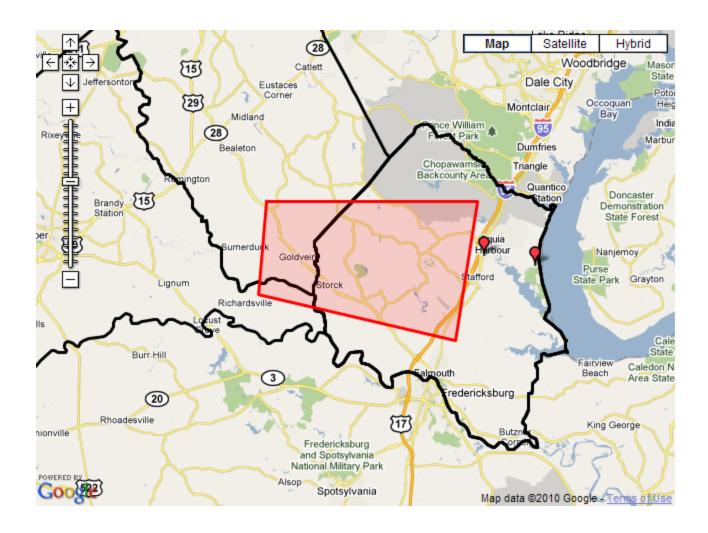
(National and Regional Radar images from 3:08pm showing showers and thunderstorms)

Around 3pm, a thunderstorm developed over Madison and Rappahannock Counties, and moved rapidly east. The storm strengthened as it passed over Culpeper County.



(NWS radar showing the Culpeper thunderstorm at 3:11 pm)

By the time the storm reached eastern Culpeper and southern Fauquier County, the storm developed a rotation (or mesocyclone), which can produce a tornado. A tornado warning was issued at 3:30pm for southeastern Fauquier County, southeastern Culpeper County, and Central Stafford County.



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BULLETIN - EAS ACTIVATION REQUESTED
TORNADO WARNING
NATIONAL WEATHER SERVICE BALTIMORE MD/WASHINGTON DC
330 PM EDT SUN JUN 6 2010
THE NATIONAL WEATHER SERVICE IN STERLING VIRGINIA HAS ISSUED A
* TORNADO WARNING FOR...
 CENTRAL STAFFORD COUNTY IN NORTHERN VIRGINIA...
  SOUTHEASTERN CULPEPER COUNTY IN NORTHERN VIRGINIA...
  SOUTHEASTERN FAUQUIER COUNTY IN NORTHERN VIRGINIA...
* UNTIL 400 PM EDT
* AT 329 PM EDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A
 SEVERE THUNDERSTORM CAPABLE OF PRODUCING A TORNADO OVER WESTERN
  STAFFORD COUNTY...OR 11 MILES WEST OF STAFFORD...MOVING EAST AT 40
* LOCATIONS IMPACTED INCLUDE...
  GLENDIE...
 HARTWOOD...
 ROSEVILLE...
 RUBY...
  RAMOTH...
  GARRISONVILLE...
PRECAUTIONARY/PREPAREDNESS ACTIONS...
TAKE COVER NOW. MOVE TO AN INTERIOR ROOM ON THE LOWEST FLOOR OF A
STURDY BUILDING AND AVOID WINDOWS. IF OUTDOORS OR IN A MOBILE HOME OR
VEHICLE...MOVE TO THE CLOSEST SUBSTANTIAL SHELTER AND PROTECT
YOURSELF FROM FLYING DEBRIS.
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While no tornado apparently developed from this storm, someone saw rotation in the storm as it passed overhead, and posted a video on the internet.

http://www.youtube.com/watch?v=BlhvceLNzc4

While it is hard to clearly see rotation in the video link, the storm was certainly capable of producing a rotating structure in the storm cloud at that time.

Shortly after, the rotation in the storm dissipated, but the storm remained very strong. At 3:50 pm, a severe thunderstorm warning was issued for the area just east of the previous tornado warning, including northeastern Stafford County, as the storm continued its march east at 40 mph.

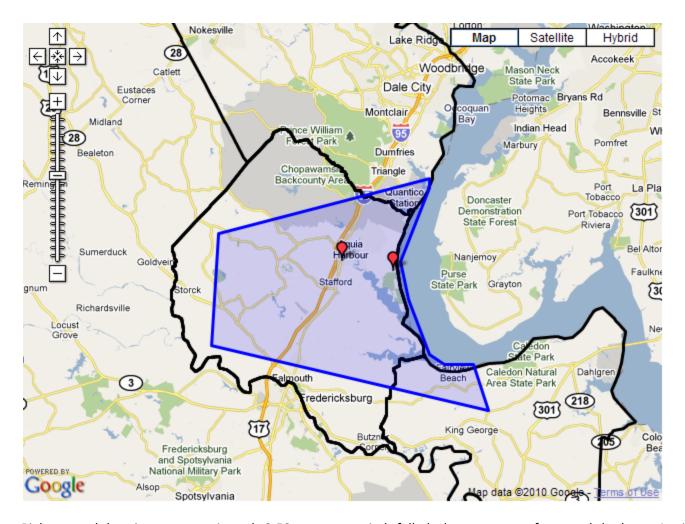
BULLETIN - EAS ACTIVATION REQUESTED SEVERE THUNDERSTORM WARNING NATIONAL WEATHER SERVICE BALTIMORE MD/WASHINGTON DC 350 PM EDT SUN JUN 6 2010

THE NATIONAL WEATHER SERVICE IN STERLING VIRGINIA HAS ISSUED A

- * SEVERE THUNDERSTORM WARNING FOR...
 WEST CENTRAL KING GEORGE COUNTY IN CENTRAL VIRGINIA...
 CENTRAL STAFFORD COUNTY IN NORTHERN VIRGINIA...
 SOUTHEASTERN PRINCE WILLIAM COUNTY IN NORTHERN VIRGINIA...
- * UNTIL 415 PM EDT
- * AT 347 PM EDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A SEVERE THUNDERSTORM CAPABLE OF PRODUCING HAIL UP TO THE SIZE OF QUARTERS AND DAMAGING WINDS IN EXCESS OF 60 MPH. THIS STORM WAS LOCATED NEAR STAFFORD...AND MOVING EAST AT 40 MPH.
- * LOCATIONS IMPACTED INCLUDE...
 AQUIA CREEK...
 POTOMAC CREEK...

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A TORNADO WATCH IS IN EFFECT FOR THE WARNED AREA.



Right around that time at approximately 3:50 pm strong winds felled a large tree on a fence and shed near Aquia Harbor, Virginia at the end of Coal Landing Road.

A few minutes later, at about 3:55 pm, a portion of the storm collapsed over the Widewater area. This produced a targeted punch of extremely strong wind that hit a heavily wooded area of Arkendale, Virginia on the Widewater peninsula. Winds estimated to be 80 mph, knocked down nearly a dozen large trees over Brent Point Road, just west of Arkendale Road, and just west of the main rail line that extends northeast through the area. In the small area of forest that sustained heavy damage, most of the large trees were knocked down out to the east, while a few pointed to the northeast and a few southeast. There was also minor damage surrounding the more heavily damaged area with scattered branches downing wires.

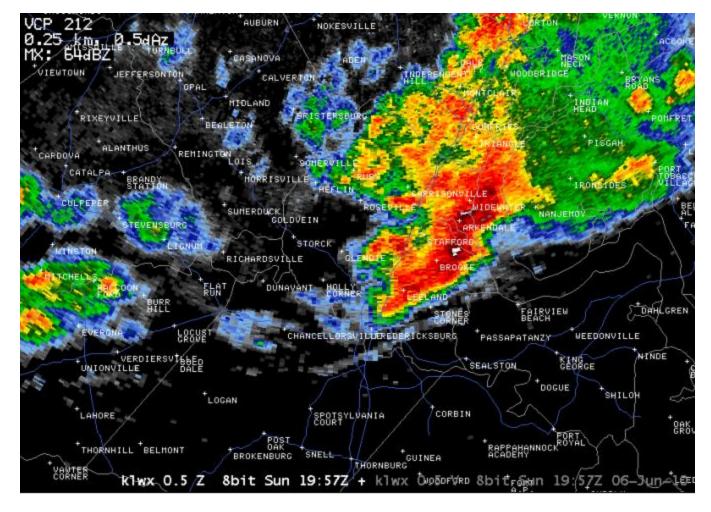




(The above two pictures of the same spot were taken coming in from the west on Brent Point Road, about ½ mile west of Arkendale Road)



(Another uprooted tree. Picture taken coming in from the east on Brent Point Road, about 100 yards from Arkendale Road and the rail corridor)



(The storm right around the time it was impacting Arkendale, Virginia. This image from 3:57 pm)

After considering the damage at the scene, and available surface and radar data, it was determined that the evidence indicates that at 3:55 pm in the heavily damaged area on Brent Point Road (state route 658), a targeted microburst (also known as straight-line winds) struck with 80 mph winds.