

**BEFORE**

**AFTER**

**Topsail Beach Pier 34° 21.87'N 77° 37.59'W**



**Bertha 7/16/96 10:25 EDT**

**Fran 9/07/96 14:29 EDT**

Many piers damaged during Bertha were destroyed during Fran. The pier at Topsail Beach sustained only minor damage after Bertha and was open a few days after the storm. Storm waves from Fran removed the section of the pier closest to the beach. The dune line which held during Bertha (to the left of the pier) was completely removed and the retaining wall behind it destroyed, leaving debris scattered in front of the buildings (light arrows). Further to the right a low dune line is replaced by an erosional scarp (dark arrows). Sand extends to third row of houses and appears to come from the left.

**Acknowledgments**

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*This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards.*

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For additional information on Flooding from Hurricane Fran  
 see  
 USGS Open File Report 96-499,  
 Aftermath of Hurricane Fran in North Carolina -  
 Preliminary Data on Flooding and Water Quality