

## Geophysical Mapping of Inland Waterways and Around Bridges For Structural Integrity

Our company has performed a Continuous Resistivity Profiling (CRP) geophysical survey around the Memorial Causeway Bridge located in Clearwater, Florida. Recent construction on a new bridge connecting the mainland of Clearwater with Clearwater Beach had experienced structural failures. The CRP survey was performed as an exploratory investigation into the underlying stratigraphy. The CRP electrode system is towed behind a boat. A GPS tracking system is connected with our Supersting R8 marine resistivity unit to collect positional data and resistivity data. The data is inverted using Marine Log Manager and Earth-Imager software produced by Advanced Geosciences, Inc. The survey helped to conclude that the structural failures at the bridge may be attributed to sinkhole activity or a series of underlying caverns that traditional drilling techniques did not identify during initial engineering and geotechnical testing performed by the contractor.

## **CRP Transect Location**

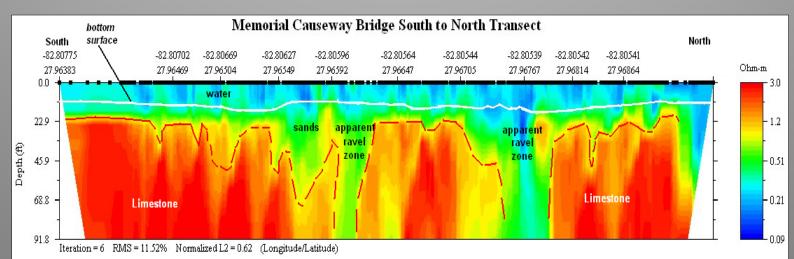


**Anomaly Locations** 



CRP Towed Electrode
System





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