Multi-channel Analysis of Surface Waves

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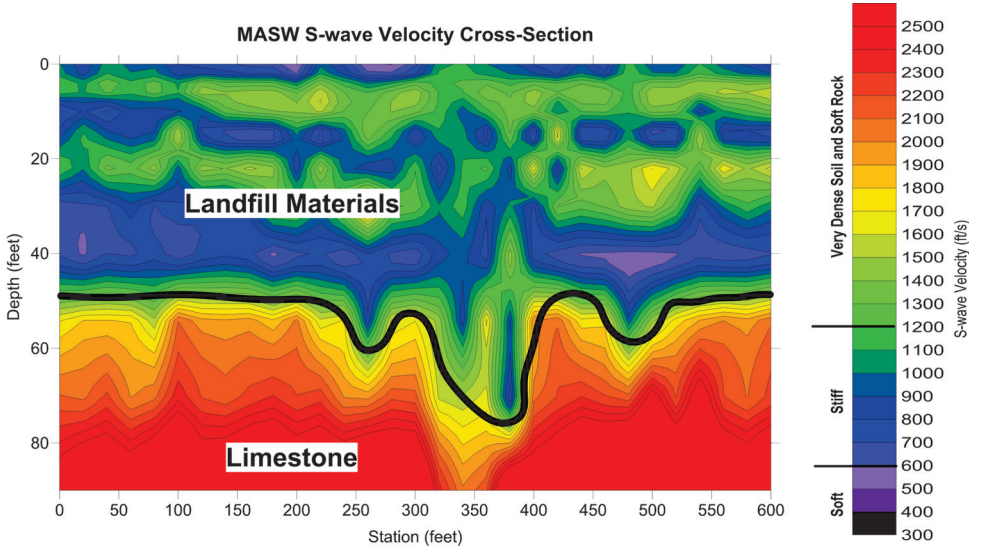
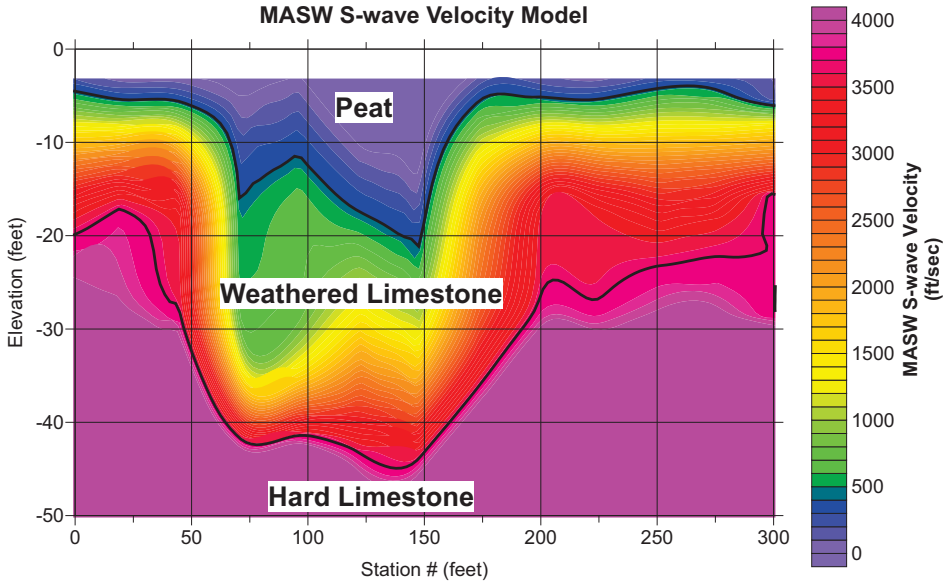
Multi-channel Analysis of Surface Waves (MASW) is a seismic method that uses the dispersive characteristics of surface waves to determine the variation of shear-wave (S-wave) velocity with depth. Shear-wave velocity is a function of the elastic properties of the soil and rock and is directly related to the hardness and stiffness of the materials. Advantages and applications of the method include:

- Non-invasively obtaining the shear-wave velocity profile for Vs30 site classification measurements (no boreholes needed).
- Developing a shear-wave velocity cross-section to depths of 60-100 feet
- Identifying anomalously soft zones in soil and weathered rock
- Correlating measurements to SPT tests and other borehole data
- Mapping karst and other geologic hazards
- Identifying velocity inversions (soft zones beneath hard zones) which may go undetected by other methods such as seismic refraction
- Landstreamer configuration allows for efficient data acquisition on soil and paved areas





For more information, contact Spotlight Geophysical Services at info@spotlightgeo.com on the web at www.spotlightgeo.com