

# Hydrographic Survey

LandScope specialises in high order inshore and nearshore hydrographic surveys. We are experienced in the design and execution of a vast spectrum of survey applications and have developed appropriate technology configurations to meet specific project needs. Clearly each hydrographic survey project requires careful consideration of the critical success factors that will deliver quality survey data on time with the highest possible regard for Health and Safety of those involved. Robust project planning and team briefing is an essential part of this process.

The resources required to complete a river cross-section survey are somewhat different to those required to conduct a pre-engineering survey for a near-shore windfarm. It is with the benefit of diverse hydrographic experience that LandScope is able to best advise its customers and guarantee a 'fit for purpose' survey solution.

## Applications include:

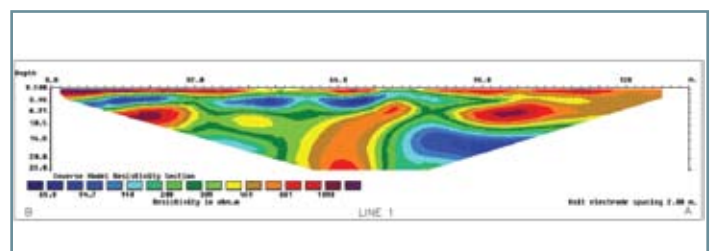
- Bathymetric Survey
- Seabed feature mapping
- Sub-seated analysis / Sub-bottom profiling
- Ports and Harbour Maintenance Survey
- Dredge support survey
- Cable / Pipeline route survey
- Channel Maintenance Survey
- Oceanographic Study



## Inshore River and Lake

LandScope has developed various survey configurations to meet the requirement of river and lake survey ranging from basic bathymetric logging systems deployed from jet-ski / inflatable canoe through to multiple sensor RIB based spreads. Survey configurations will usually be designed around the specific project requirement to ensure quality acquisition in a safe manner. In addition to bathymetric data acquisition LandScope offers the following specialist survey sensors and techniques to the river and lake market:

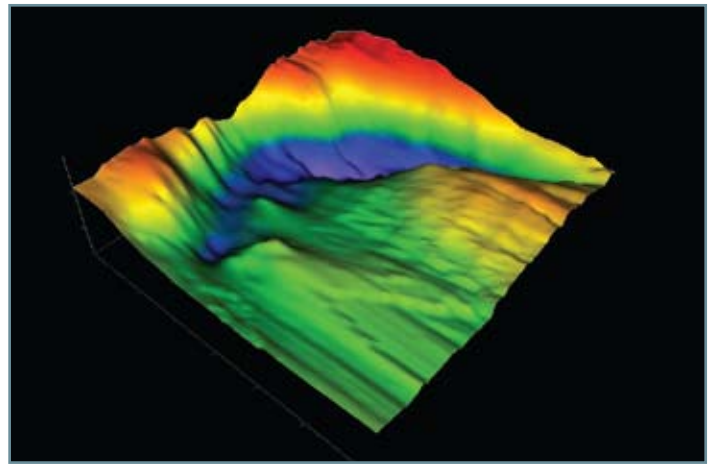
- Ground Penetrating Radar
- Sub-bottom Profiling Sonar
- Riverbed imaging - Scour survey and debris mapping
- Resistivity Survey



# Ports and Harbours

Based on Trimble Hydro Pro, NavEdit and AutoDesk Civil 3D software packages LandScope offers an integrated hydrographic solution to the Ports & Harbours and maintenance dredging community.

Our 5m Zodiac RIB based hydrographic survey system provides a rapid mobilisation and low cost survey platform capable of addressing most ports and harbour survey works. Larger vessels of opportunity may be rapidly equipped as specifically required.



# Estuarine, Coastal and Offshore

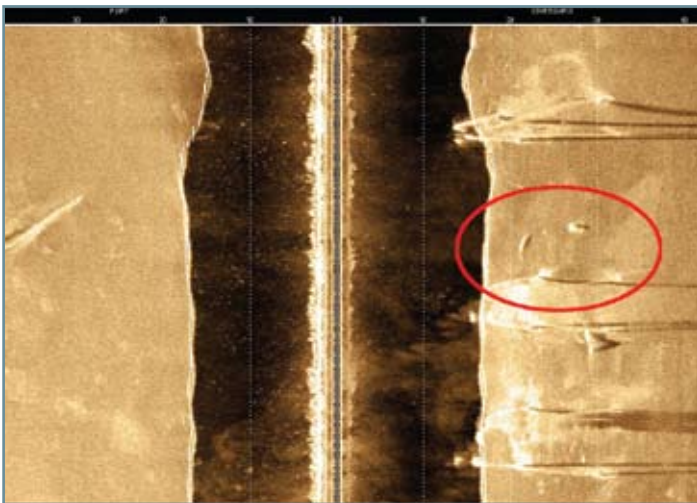
LandScope owns and has access to the most modern hydrographic survey equipment which is managed and maintained to the highest quality control standards. Incorporating the Real-time Kinematic GNSS and Autodesk Civil 3D systems which are corner-stones of our business LandScope is able to maintain the highest standards of positioning, data acquisition and processing whether the survey task is onshore or offshore or even a transition of both.

Our vessel selection will vary depending upon application, however, 'fit for purpose' will always be governed by HSE best practice and safeguarding of data quality. Survey procedures have been developed based on International Hydrographic Organisation standards and significant multi-environment hydrographic survey experience and are relevant to the latest survey equipment available.

Real-Time-Kinetic (RTK) GNSS survey systems from Trimble ensure

- Highest order accuracy available to dynamic operations - to tie all data sets together
- Accepted technology for (IHO) highest order bathymetric survey
- Removes the need for implementation of vessel heave and water level corrections to data acquisition
- Improved quality control of data acquisition in real time
- Time savings

AutoDesk Civil 3D provides an incredibly versatile deliverable toolkit whether for the production of bathymetric charts and sections or the compilation of dredge volumetrics.



Related Inserts Available

Geophysical Survey



Land Survey/ Geomatics

