

HYDROGRAPHIC SURVEYS

To facilitate and enhance the quality of our services, Murphy Surveys provide a Hydrographic Survey Service for all marine related needs. This is achieved using the latest survey equipment combined with specific hydrographic software to design, capture, process and generate the final product.

Hydrographic surveys may be conducted to support a variety of activities: nautical charting, port and harbour maintenance and development (dredging), coastal engineering (beach erosion and replenishment studies), coastal zone management, floodplain studies and offshore resource development.

The primary use of hydrographic surveys is for the production of nautical charting. Side scan sonar is often deployed to facilitate the detection of submerged dangers to navigation. Tide or water level measurements are also recorded to provide a vertical reference (Mean Lower Low Water) for water depths.

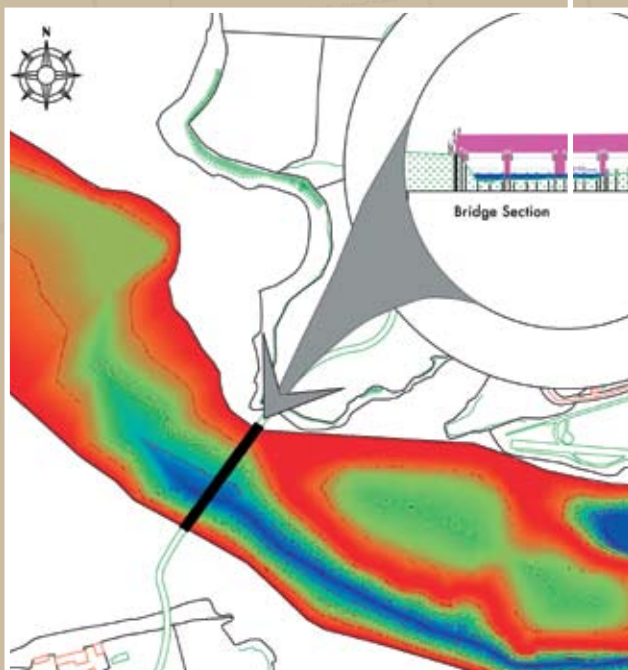
This service can be utilised by a wide range of clients from port companies and local authorities to engineers and private bodies.

SERVICES INCLUDE:

- Floodplain studies
- Pre & Post Dredge and surveys
- Coastal Defence & Erosion
- Hydrodynamic Studies
- Environmental Sciences
- Water Depth Measurement and thus reduced level of bed of river, sea, lake etc
- Floodplain studies: data used to predict flooding and solutions and generate models
- Drogue tracking: used to determine current speed and direction of sewage outfalls involves an underwater sail that is tracked for a period of time
- Dye tracking: as above but uses a red dye in the water. Used to calculate dispersion rates of sewage
- Current metering: measures the speed and direction of the current
- Measurement of turbidity salinity and suspended solids
- Side scan sonar: used for object detection on sea bed
- Seismic: used to profile sub bottom, layers below sea

On completion of site work and processing, the data can be presented in various formats to suit the clients requirements, these include:

- Contour maps
- Cross sections
- AutoCAD
- Volumes
- Modelling
- ASCII X,Y,Z
- Microstation
- Microsoft Office



Offices in Kildare, Cork, Belfast, London. Head office + 353 45 484040 info@murphysurveys.ie