

# Grensmaas Project: River Survey for Flood Control

The planned widening of the Dutch Maas river (Meuse) represents a landscape correction that will prevent future flooding. Gravel barriers are being prepared in order to buffer any additional flow. Hydrography is imperative in this region. The river will be at its widest point at the town of Itteren.

PS Survey performed the underwater surveys. A sounding vehicle moved across the surface using multibeam sonar to collect millions of points to profile the river floor in 3D. These points were then imported into Pythagoras CAD software which converted the point-cloud into a digital terrain model (DTM).

Because of the constant terrain changes at the bottom, PS Survey performs mapping on a regular basis. A combination of soundings and land-based surveys were needed to deliver the desired results. Pythagoras facilitated conversion into maps and digital terrain models and allowed volumes and profiles to be calculated based on current conditions.

A dedicated tool adds colouring to the maps, representing differences and changes in volume as compared to previous surveys. These maps are visually attractive and graphically illustrate the current state of the project.

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<https://www.hydro-international.com/content/news/grensmaas-project-river-survey-for-flood-control>

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