

Closing the gap between approvals and construction

Water & Environment · Flood Impact · Hydrology
Denmark & Perth, Western Australia

Founded

2026

Founder

Blake Marxsen,
MIEAust

Fiord Group provides deep hydrotechnical expertise to create strategies that protect assets, communities, and ecosystems. Fiord Group closes the gap between approvals and construction.

Sectors



Mining &
Resources

Diversion drains, sediment basins, ROM pad drainage, tailings and discharge compliance. Iron ore, gold, copper and lithium.



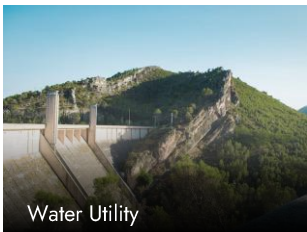
Infrastructure &
Government

Councils, rail corridors and roads. Flood impact assessments packaged the way the assessing authority needs them, then carried into design.



Agriculture &
Land

Farm dams, irrigation, drainage and water security. Broadacre water engineering built for the paddock.



Water Utility

Storages, headworks and spillway capacity. Consequence assessment, dam-break analysis, and supporting hydrology and hydraulics.



Land
Development

Subdivisions, stormwater management plans and overland flow. Flood levels and drainage strategy settled before the lots are drawn.



Energy &
LNG

Export terminals, hydrogen and solar. Surface water, flood immunity and drainage for assets that cannot afford an outage.

Disciplines⁽⁷⁾

“Played a pivotal role in one of the world’s largest LNG projects. His technical and communication skills were crucial to its success.”

- Director | ASX:WOR

“A gifted engineer with exceptional problem-solving and communication skills, evident in the AI platform he designed and built.”

- Engineer | ASX:WOR

“Outstanding technical skills and deep knowledge in environmental engineering and hydro-technical analysis, significantly enhancing the quality and depth of our dam break analysis.”

- Principal | NewFields

Hydrotechnical & Hydraulic Engineering

1D and 2D numerical hydrodynamic modelling for complex open-channel flows, non-Newtonian tailings rheology, dynamic flood inundation, and hydraulic structure design.

Catchment Hydrology & Water Resources

Quantification of precipitation-runoff processes, design rainfall derivation (e.g., ARR, GSDM, PMP), and integrated surface water management across varied climatic zones.

Dam Safety & Consequence Assessment

Dam breach modelling, Population at Risk (PAR) estimation, and Consequence Category Assessments for tailings and water storage facilities under ANCOLD, GISTM, and corporate standards

Infrastructure Drainage

Sizing and hydraulic design of surface water networks, culverts, detention basins, sediment/erosion controls, and specialized drainage for ROM pads, waste landforms, and rail corridors.

Environmental Approvals & Impact Assessment

Managing surface water regimes and aquatic ecosystems through statutory environmental approvals (WA EPA Part IV/V, DWER clearing permits), Environmental Impact Assessments (EIA), surface water compliance, and mine closure planning for inland waterways

9+

Years of technical consulting across water resources and environment

US\$26B

Largest project as lead engineer — stormwater and hydraulic structures

40+

Major studies across mining, energy, infrastructure and government

4

Continents — Australia, North America, South America, Asia-Pacific

Toolset

CLOSED LLM · OLLAMA · TUFLOW · HEC-SUITE · HY8 · QGIS · SWMM · RORB



Contact
Info@fiord.group
0404 684 129
LinkedIn

Address
Denmark, Western Australia
Perth, Western Australia

Engagement
Engineering the gap between
approvals and design

