BLUE MARBLE GEOGRAPHICS
MIND THE GAP BETWEEN WORLD AND MAP®

Pilbara Ports Authority
From Just Getting Started with Global Mapper to Saving Millions in Project Management

BACKGROUND

On 1 July 2014, the Port Hedland Port Authority in Western Australia merged with the Dampier Port Authority to form Pilbara Ports Authority. Pilbara Ports Authority stretches from the Port of Ashburton near Onslow in the south, to Port Hedland in the north, and includes the future Ports of Anketell and Cape Preston East.

The merging of these ports to form Pilbara Ports Authority incorporates the largest bulk export tonnage port in the world focused on the export of Australia's rich mineral resources as well as world-class oil and gas operations. Pilbara Ports Authority has responsibility for safe and efficient shipping within its waters and for the overall planning and development responsibility for port lands. Its purpose is to facilitate and grow trade while protecting the environment and working with communities for the benefit of all Australians.

Pilbara Ports Authority is governed under the Port Authorities Act 1999 and operates as a corporation with a board of management that reports to the State Government of Western Australia's Minister for Transport.
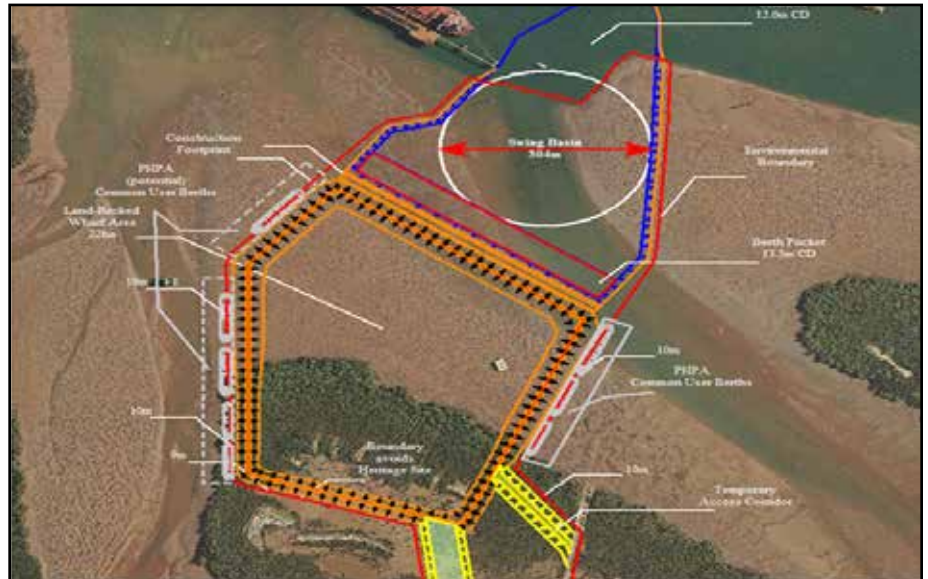
CHALLENGES

Pilbara Ports Authority is the largest bulk export tonnage port in the world. With this responsibility comes a variety of coastal and harbor engineering challenges. While all are important, the most critical stage to maintaining or expanding a port is accurate dredging.

In late 2012 Frans Schlack, Dredging Manager for Pilbara Ports Authority was tasked with the Lumsden Development Project. The project involved designing a workable concept to expand port capacity. With over 40 years of experience as Dredging Manager, Schlack had managed several dredging projects over the year however he found himself in a unique situation where he could not depend on a survey department to carry out any survey or GIS work.

Lumsden Development Project – dredging concept to expand port capacity. Existing data manipulated in Global Mapper to develop ideas info a workable concept.

Challenges included the ability keep GIS work in-house and to work with data provided by surveyors using expensive marine application. Pilbara Ports Authority needed a software solution that did not cost tens of thousands of dollars but would work as a non-terrestrial, marine application and be able to handle highly accurate projection transformation for converting marine charts from WGS84 to GDA94. The tool needed to meet all of these requirements, without having a steep learning curve so Schlack could do the project himself.

SOLUTIONS

Schlack first discovered Global Mapper because he needed a program that could change charts from WGS84 to GDA94 and then realized it could also be use on the Lumsden Development project. During the course of the project Schlack had some difficulties opening data

created by other applications. He contacted the Blue Marble Technical Support Team and received a customized update of the software within 24 hours.

Using the enhanced version of Global Mapper, Schlack proceeded to change the original design of the Lumsden Development Project and was able to improve the design so that it complied with the targets and made sense from a dredging and reclamation perspective. He quickly became efficient with the software and was able to keep the entire project in-house due to Global Mapper's simple and intuitive interface. The results were a savings of around $70 million in dredging costs alone but the overall savings compared to the original design came to $160 million.

ABOUT THE PRODUCT

Global Mapper is an affordable and easy-to-use GIS application that offers access to an unparalleled variety of spatial datasets and provides just the right level of functionality to satisfy both experienced GIS professionals and beginning users. Equally well suited as a stand-alone spatial data management tool and as an integral component of an enterprise-wide GIS, Global Mapper is a must-have for anyone who deals with maps or spatial data.

Key features in this case include: 3D processing/analyzing tools, ability to import over 250 data formats, Volume Calculation Tools, and Global Mapper's renowned data handling capability allowed files from multiple sources to be converted and reprojected to ensure consistency and interoperability.

ABOUT BLUE MARBLE GEOGRAPHICS

Trusted by thousands of GIS professionals around the world, Blue Marble Geographics is a leading developer of software products and services for geospatial data conversion and GIS. Pioneering work in geomatics and spatial data conversion quickly established this Maine-based company as a key player in the GIS software field.
Today's professionals turn to Blue Marble for Global Mapper, a low-cost, easy-to-use yet powerful GIS software tool. Blue Marble is known for coordinate conversion and file format expertise and is the developer of The Geographic Calculator, GeoCalc SDK, Global Mapper, LiDAR Module for Global Mapper and the Global Mapper SDK.

THE BOTTOM LINE

"By being able to work with Global Mapper, it has enabled my Organization to increase its Port Capacity by billions (no typo) of Australian Dollars."

FRANS SCHLACK
DREDGING MANAGER
PILBARA PORTS AUTHORITY