

Terrestrial/Marine LULC Classification Mapping of Abu Dhabi

Proteus, headquartered in the UAE, has been contracted by Environment Agency “ Abu Dhabi (EAD) to deliver fine-scale terrestrial and marine land use/land cover (LULC) and habitat maps for the entire Emirate of Abu Dhabi. The multi-million dollar project will include 60,000 sq km of land area and the coastal marine environment down to the 15m contour.

The project calls for extraction of LULC and habitat features from high-resolution multispectral satellite imagery. In the offshore mapping, highly accurate bathymetric and seabed classifications to depths of 15 to 20 metres in the Persian Gulf will be extracted.

The project will be completed in three phases, and the deliverables will include:

- Bathymetric analysis
- Orthorectified mosaic
- LULC/Habitat classification maps for land and marine ecologies
- Geospatial models for GIS input
- Published maps at multiple scales
- Knowledge transfer

EAD is a government agency tasked with protecting, managing and conserving the environment, as well as promoting sustainable development, in the Emirate of Abu Dhabi. EAD released a competitive request for proposals and awarded the contract to the team led by Proteus, headquartered in the United Arab Emirates and United Kingdom. Partners in the project include DigitalGlobe Inc., GMV and EOMAP GmbH.

Locally in the Emirate, Proteus will receive support for the project from Nautica Environmental Associates of Abu Dhabi, which will provide ecological consultancy, field survey and ground truthing services in both the onshore and offshore environments.

Since 2011, Proteus has been producing mapping and classification projects using multispectral satellite imagery. These mapping projects have been delivered for environmental, oil & gas, engineering and other coastal zone applications in Europe, USA, the Middle East and Caribbean.