Research: GIS Project

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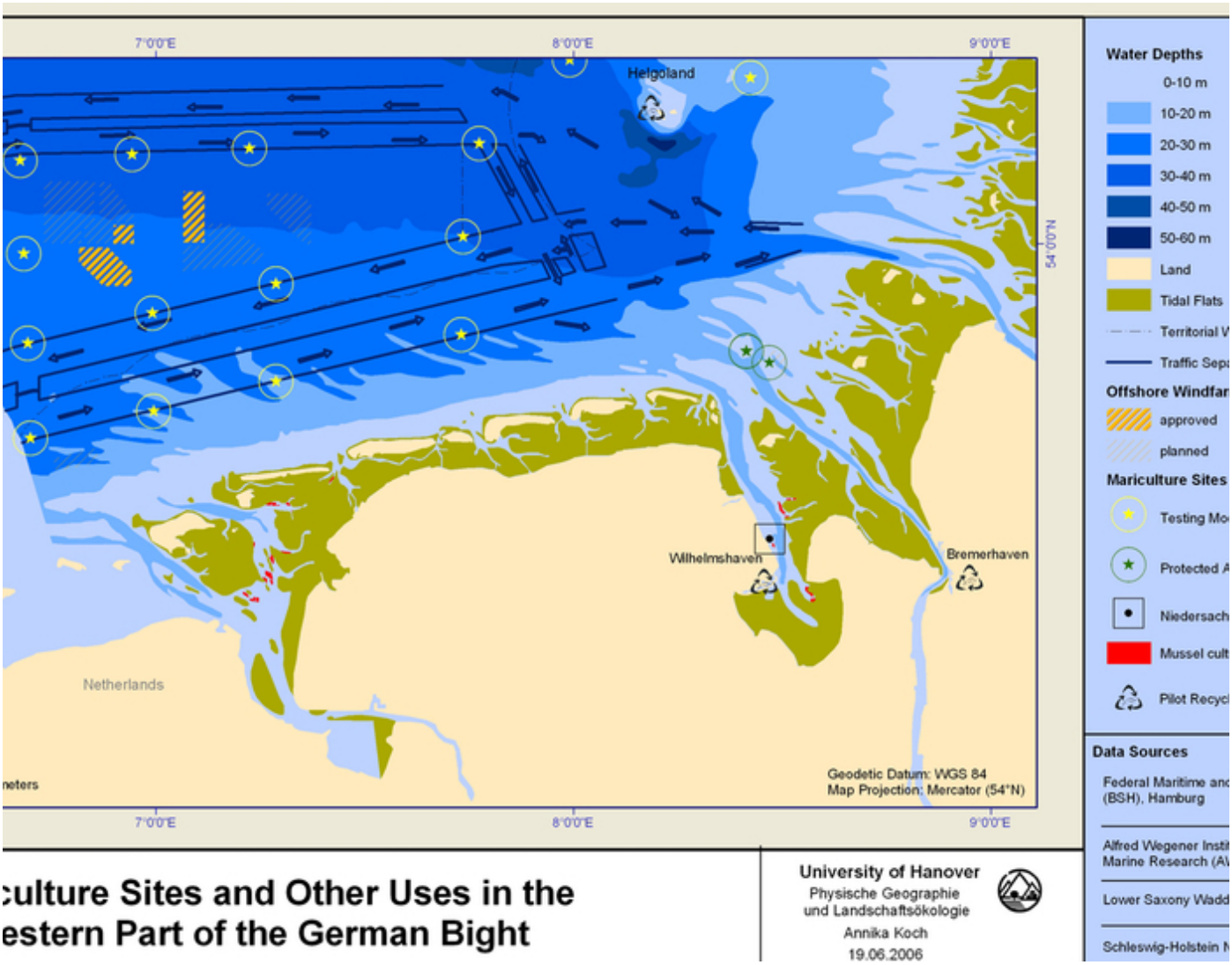
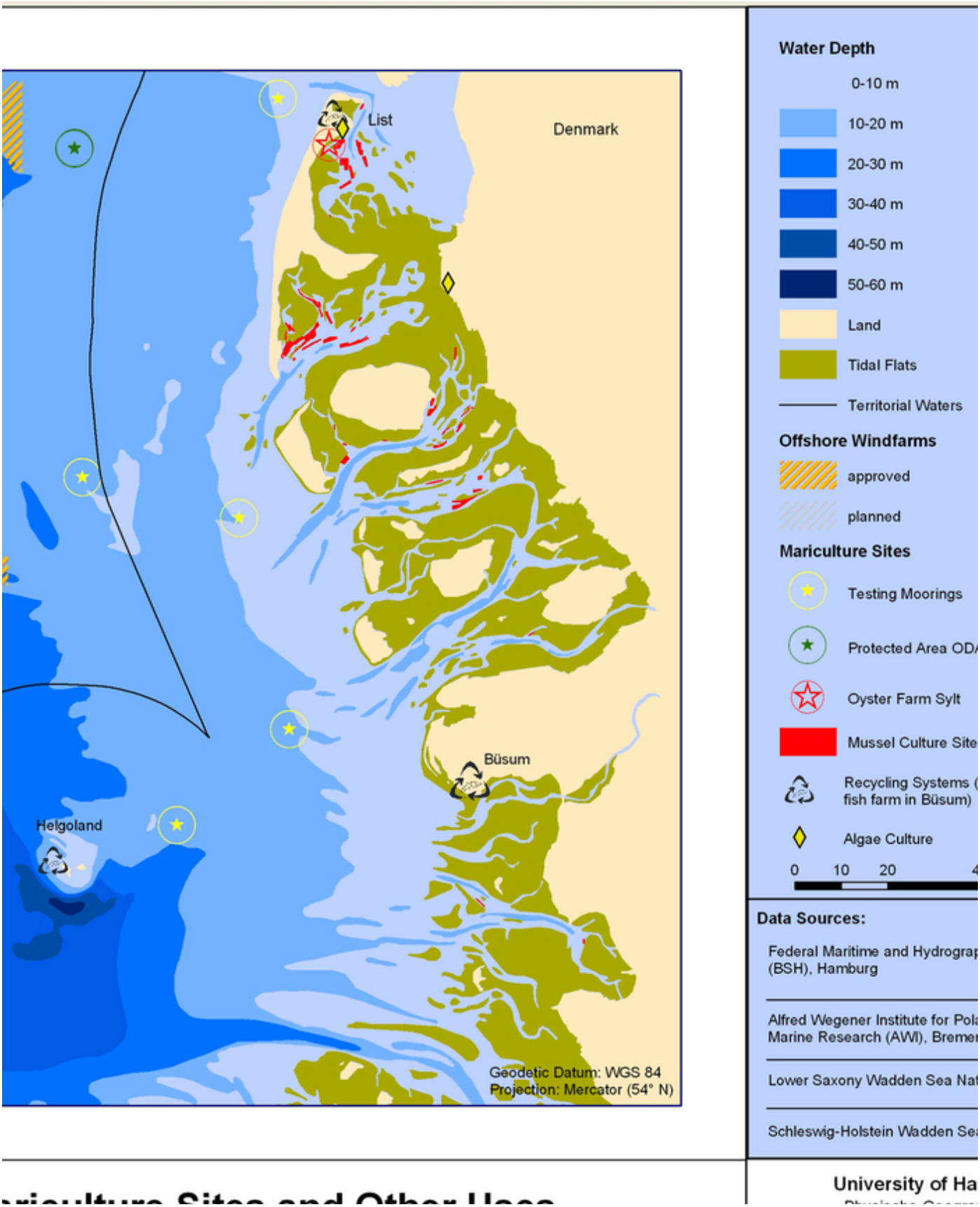
Status: finished

Potentials for Open Ocean Aquaculture in the North Sea Region

Within the scope of the diploma thesis "Potentials for Open Ocean Aquaculture in the North Sea Region" maps of the German Bight have been created. These maps show the current mariculture sites in the German part of the southern North Sea. In order to create those maps the geographic information system ArcGIS has been used. ArcGIS software allows you to author, analyze, map, manage and publish geographic information. Raw data have been provided by different institutions: the Federal Maritime and Hydrographic Agency, the administrations of the Waddensea National Parks of Lower-Saxony and Schleswig-Holstein, the Federal Nature Conservation Agency and the Alfred Wegener Institute for Marine and Polar Research. One map shows the coastal area of Lower-Saxony (Fig.1) and one the Schleswig-Holstein part of the North Sea (Fig.2). The maps cover commercial mussel beds in the Wadden Sea, an oyster farm, land-based recirculation systems as well as present study areas.



Study areas include test moorings (Offshore Aquaculture), protected research test areas (Roter Sand Project, MytiFit Project and AquaLast Project) and gangways for transhipment (River Jade Project). Regarding to the question of potentials of OOA the maps also include data of protected areas and sites of planned and approved offshore-windfarms that might be potential sites for marine aquaculture installations.



Partners:

- University of Hanover, Faculty of Natural Sciences, Department of Physical Geography and Landscape Ecology
- Alfred Wegener Institute for Marine and Polar Research (AWI)
- Federal Maritime and Hydrographic Agency (BSH)