

Information sheet

Scale

The chart is divided into 1 km² grids. There is also a 500 m scale shown.

For the purposes of this exercise it can be assumed that one nautical mile measures 115 mm on the chart.

Nautical mileage conversion

The table below is a quick conversion chart from nautical miles to distance on the chart in millimetres.

Nautical miles	0.1	0.2	0.25	0.3	0.5	0.6	0.75	1
Distance mm	12	23	29	35	58	69	86	115

Environmental sensitivities

There are a number of sensitivities in the area. The main locations are indicated on the chart.

The following table provides some extra useful information:

Shell fisheries	There are three main areas for shell fisheries. The industry is worth approximately \$1,000,000 annually. The majority of the harvest is exported with a small proportion sold locally.
Sea fisheries	The main area for sea fisheries lies to the east and west of Kidney Island. Six local fishing boats operate out of Nuaport. They land a catch of over 1,000 tonnes per year worth over \$3,000,000 annually. The fish are processed locally providing employment for a staff of 25 employees.
Marine leisure	There is a marina located in the Nuaport Harbour area, providing berths for over 50 yachts. The area to the south of Nuaport is also a popular area for water-skiing and powerboating.
Tourism	The sandy beach at Nuaport is very popular, attracting local and foreign tourists. There is a large hotel located to the west of the town. There is also a quieter beach close to Delta Marshes.
Seabirds	Kidney Island is uninhabited. It is home to various colonies of seabirds and is an important nesting site. A colony of Waders occupies Delta Marshes. This area, along with mudflats and saltmarshes to the east also hosts large numbers of migratory birds. There is also a colony of birds nesting on the cliffs to the south of the Oil Terminal.
Whales	A pod of whales is regularly seen in the area around grid reference 27AE.

Commercial resources

Various commercial resources are indicated on the chart. The following table provides some useful extra information:

Power plant	The power plant is gas-fired and is an important contributor to the national electrical grid. Seawater is used as a coolant, resulting in a 2–3 knot current at the intake.
Oil terminal and Petro-chemical terminal	<p>The oil terminal is an import and storage point for crude oil for the national refinery located inland. It also imports and stores gas oil, heavy fuel oil and gasoline.</p> <p>The terminal imports around 200,000 tonnes of crude every week, delivered by two 100,000 dwt tankers. Product is delivered in smaller parcel sizes by 10,000 dwt tankers.</p> <p>The terminal has a small petro-chemical plant which produces small quantities of chemicals for the agricultural industry locally.</p>
Nuaport Docks	<p>The docks area is used to import a variety of goods, usually delivered by container or general cargo vessels. A substantial amount of wood is exported through the port. An international ferry operates on a daily basis.</p> <p>Container ships of up to 50,000 TEU and general cargo vessels of up to 25,000 DWT regularly use the port.</p> <p>There are some repair facilities but no dry-docks.</p>

Oil and hydrocarbon properties

The table below details the typical characteristics of the oils and hydrocarbons handled at the oil terminal and carried as fuel on vessels using the harbour area.

Oil type	S.G.	API	Pour point (°C)	Viscosity @ 20 °C (cSt)	% Asphaltene
Gasoline	0.73	62	N/A	0.5	0.0
Naptha	0.70	57	N/A	0.97 (@25°C)	0.0
Gas Oil	0.84	35	N/A	5.5	0.0
Heavy Fuel Oil	0.95	17	-1.0	3,000	7.0
Naniun Crude	0.84	37	-15	5.8	0.8
Talang Crude	0.85	33	12	3.7	0.3

Sea temperature

The sea temperature in the area varies from 5°C during the winter months to 18°C during the summer months.

Currents

The table below shows the current direction and speed at the Tidal Diamonds shown on the chart.

A		B		C		D		E	
<i>Dir.</i>	<i>Speed</i>	<i>Dir.</i>	<i>Speed</i>	<i>Dir.</i>	<i>Speed</i>	<i>Dir.</i>	<i>Speed</i>	<i>Dir.</i>	<i>Speed</i>
180	0.1	225	0.3	120	0.25	270	0.25	045	0.30