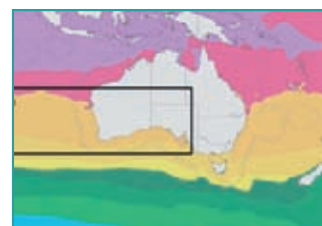


Water Mass I13

Indian Central Region: Indian Central Core Water Mass

Description: A core water body in the Central Indian Ocean that shares the same water properties as the Coral Sea Circulation Region in the Pacific (P13). The seasonal Leeuwin Current, which flows down the west Australian coast from an origin around Shark Bay, suggests there will be seasonal changes in the circulation of this water mass. The bulk of the seasonal eastward drift feeding the Leeuwin Current continues around Cape Leeuwin and floods over the shelf of the Great Australia Bight, ending just to the east of Kangaroo Island in south Australia. The change in direction of the current around Cape Leeuwin coincides with increased eddy activity in the south-west shelf and offshore region of western Australia. This is indicated in the Level 3 energetics map, which also clearly demarcates the offshore edge of this current system.

Near the central Great Australia Bight, the Leeuwin Current appears to dissipate and at the same time a core homogeneous water mass appears at the head of the bight. The extension of the Leeuwin Current reappears to the east of this region.



Water Mass I13	Mean	Min	Max	Std. Dev.
Temperature (°C)	19.15	12.89	26.25	2.50
Salinity	35.64	35.13	37.56	0.14
Oxygen (mm/l)	5.09	4.61	5.95	0.23
Nitrate (mg/l)	1.36	0.00	13.09	1.57
Silicate (mg/l)	2.55	0.31	16.21	1.58

Depth (m):	70
Latitude (°S):	-29.1
Longitude (°E):	153.4
Volume (km³/106):	1.58

...continued page 2

For further information, please contact:

CSIRO – Marine Research
GPO Box 1538, Hobart TAS 7001, Australia
Tel: +61 3 6232 5222 Fax: +61 3 6232 5000
Web: www.csiro.au

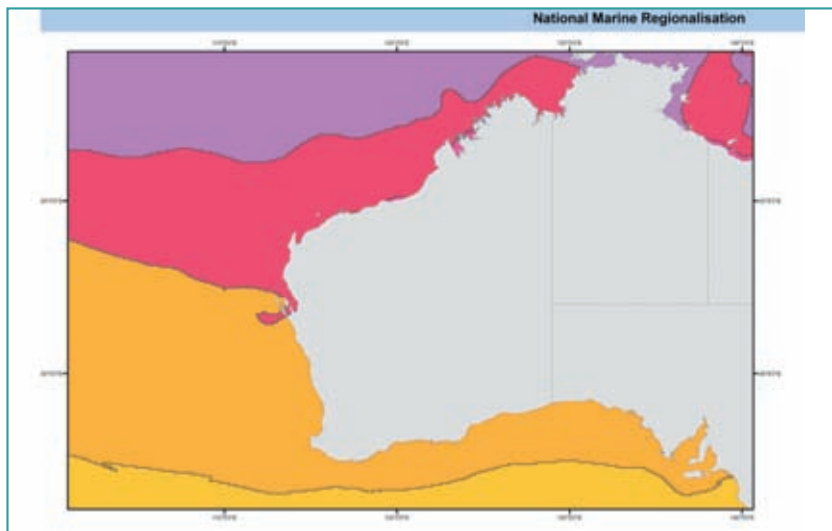


Australian Government

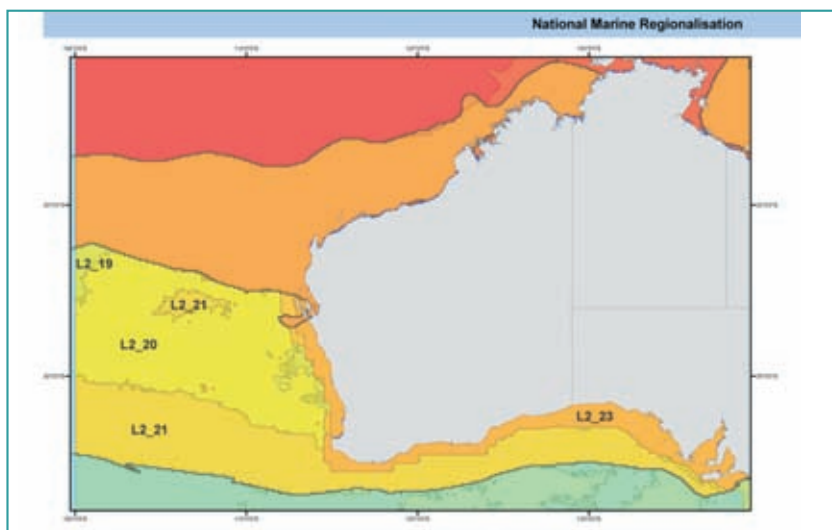
Department of the
Environment and Heritage

Geoscience Australia

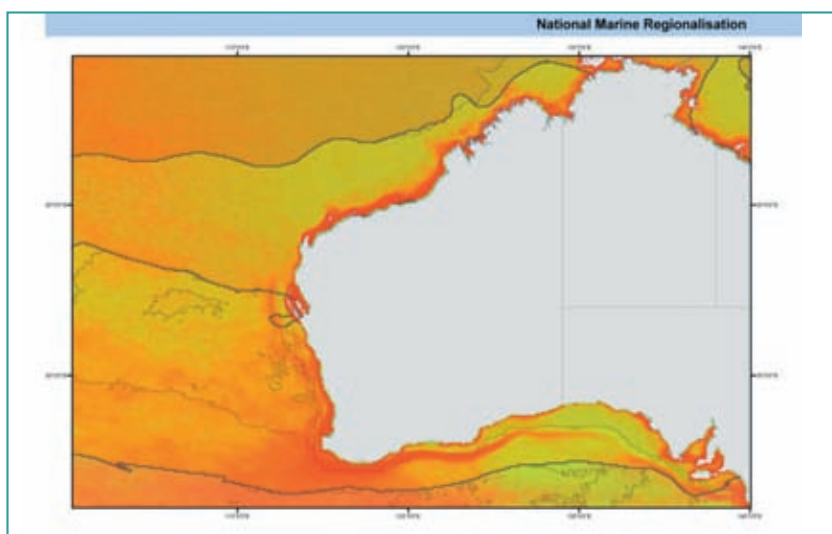




Level 1B



Level 2



Level 3

