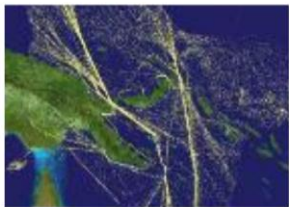




...a PSSA in Papua New Guinea...

Presentation at SPREP in Apia, Samoa : 21st September 2017



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Outline

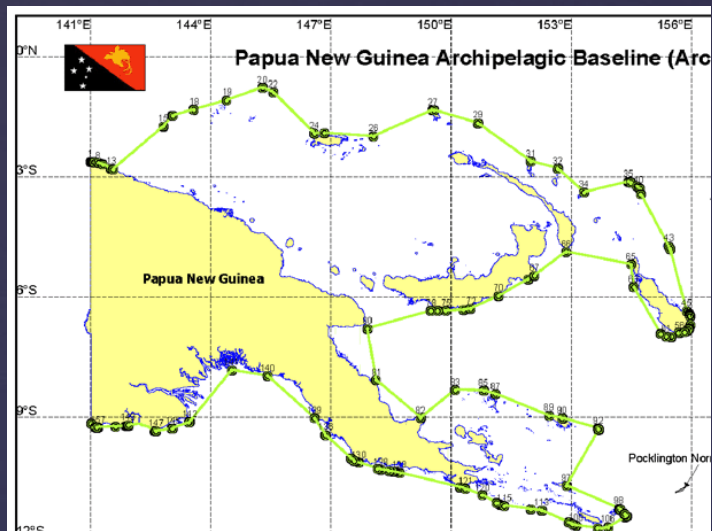
1. Situation – Jomard Passage Casualties
2. Action – PSSA Proposal
3. Outcome - PNG PSSA Designation
4. Conclusion & Offering Support

Situation

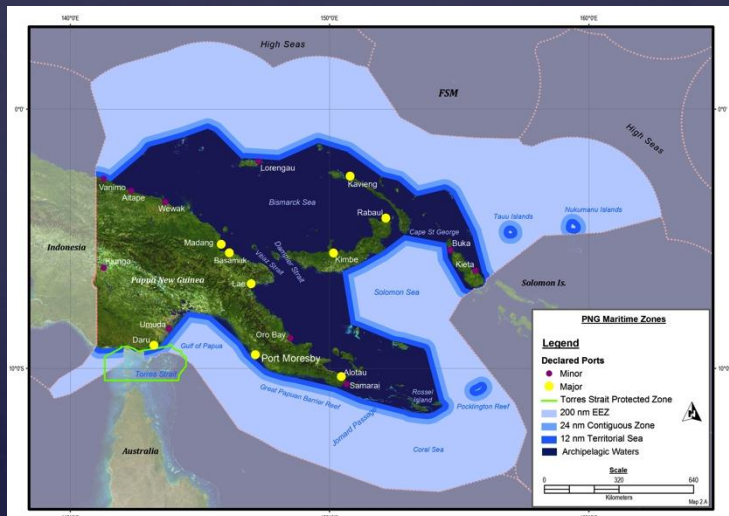
Where is PNG?



PNG's Ocean Realm



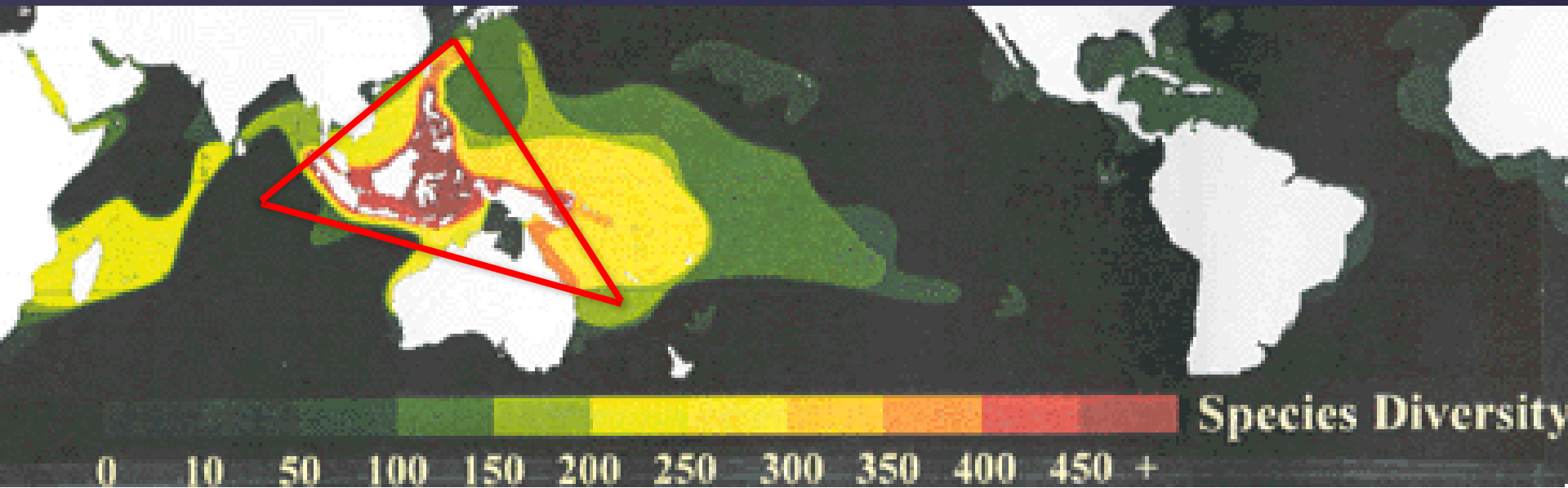
- “Archipelagic State”
- 7 main islands and > 600 other islands
- Total coastline: > 20,000 km
- Land area: > 460,000 km²
- Sea Area (EEZ): ~ 2.4 million km²
- > 5 x more sea than land
- Human population ~ 7.3 million (>60% within 100km of coast)
- Currently in a “Resources Boom” (natural resources – minerals and oil and gas)



PNG's Marine Environment is part of the Coral Triangle

Coral Triangle - Global epi-centre of marine biodiversity

Source: C Veron



- PNG hosts >500 species of *hard coral*, 44 species of *mangrove* & 14 species of *seagrass*
- GBR hosts ~350 species of *hard coral*, 34 species of *mangrove* & 14 species of *seagrass*

Ecological & Scientific Significance

Major turtle Nesting Area (all islands in southern Milne Bay Prov.)

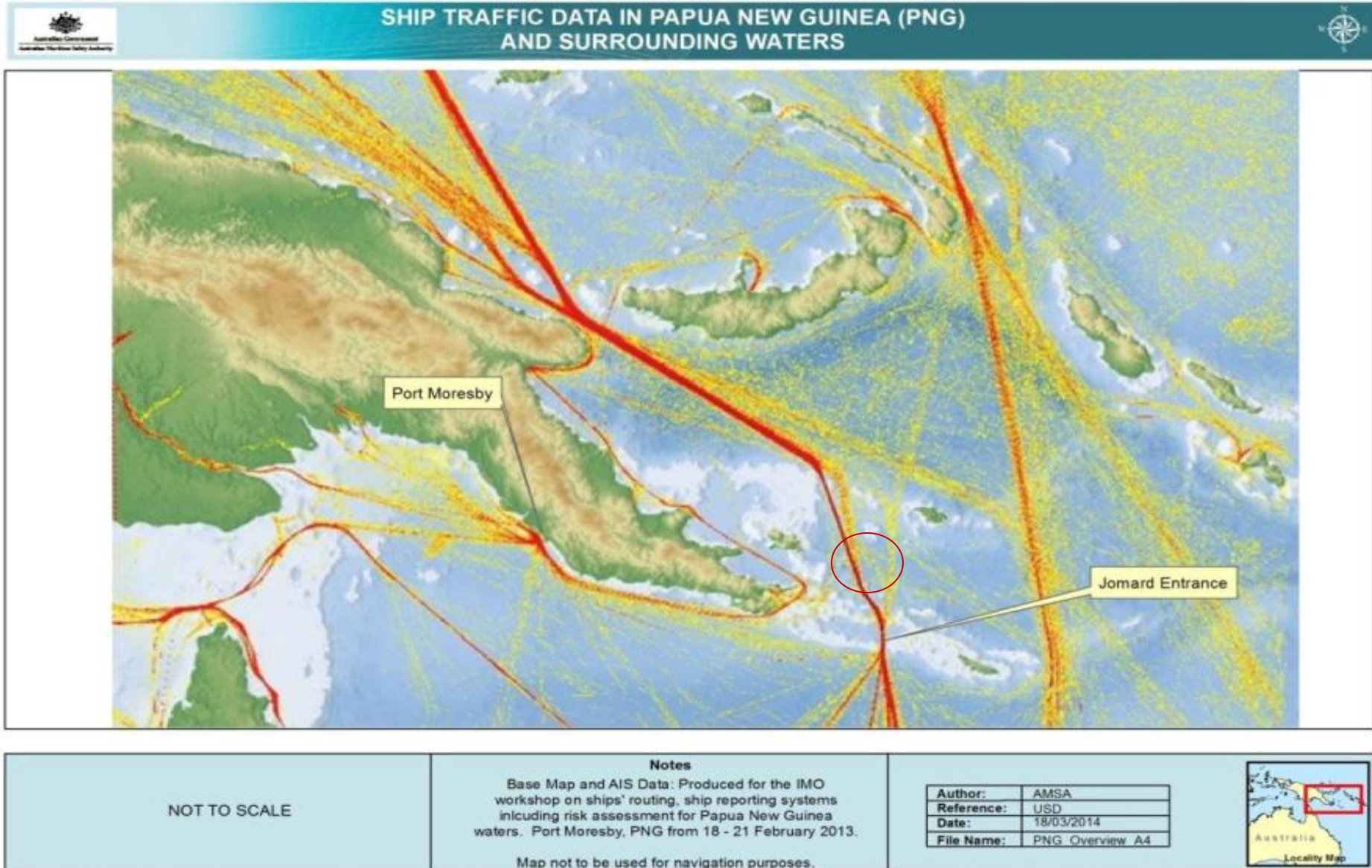


Traditional, marine-based subsistence livelihood – *Sea is their supermarket !*



International Transit shipping

~9800+ ships per year / ~ 26+ ships per day



Vulnerability to shipping

Adjacent reefs have many wrecks





Oil Spill

Raw Sugar Spill

Impacts

- Oil spill pollution
- Sugar bleaching Coral Reefs-Permanent Damage

Threats from International shipping

- 🌐 **Vessel Collisions & Groundings
causing Oil & Chemical Spillage
Pollutions.**
- 🌐 **Reefs Destruction from Groundings.**
- 🌐 **Pollution from Garbage.**
- 🌐 **Disruption of Daily Livelihoods of
Local People.**
- 🌐 **Disruption of Species Breeding**

Action

As a Result of the Vulnerability to
shipping,
Conducted a
Risk Assessment
Within the boundaries of the
International Shipping Routes.
(Jomard Entrance-2011)

Marine Habitat Surveying-Jomard Entrance-2011



Sorting Out Garbage



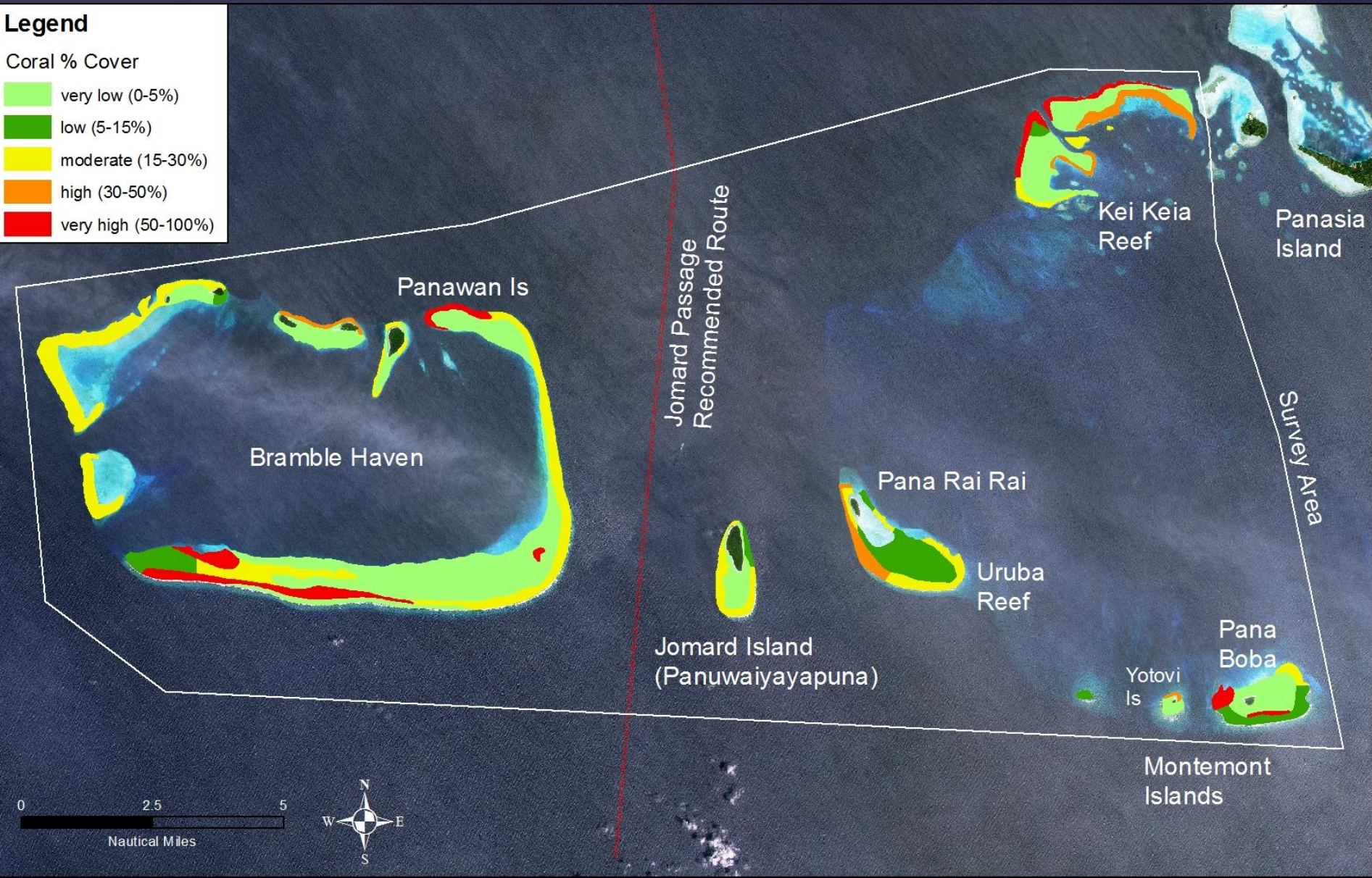
Ecological & Scientific Significance

Marine Habitat Maps - % Coral Cover

Legend

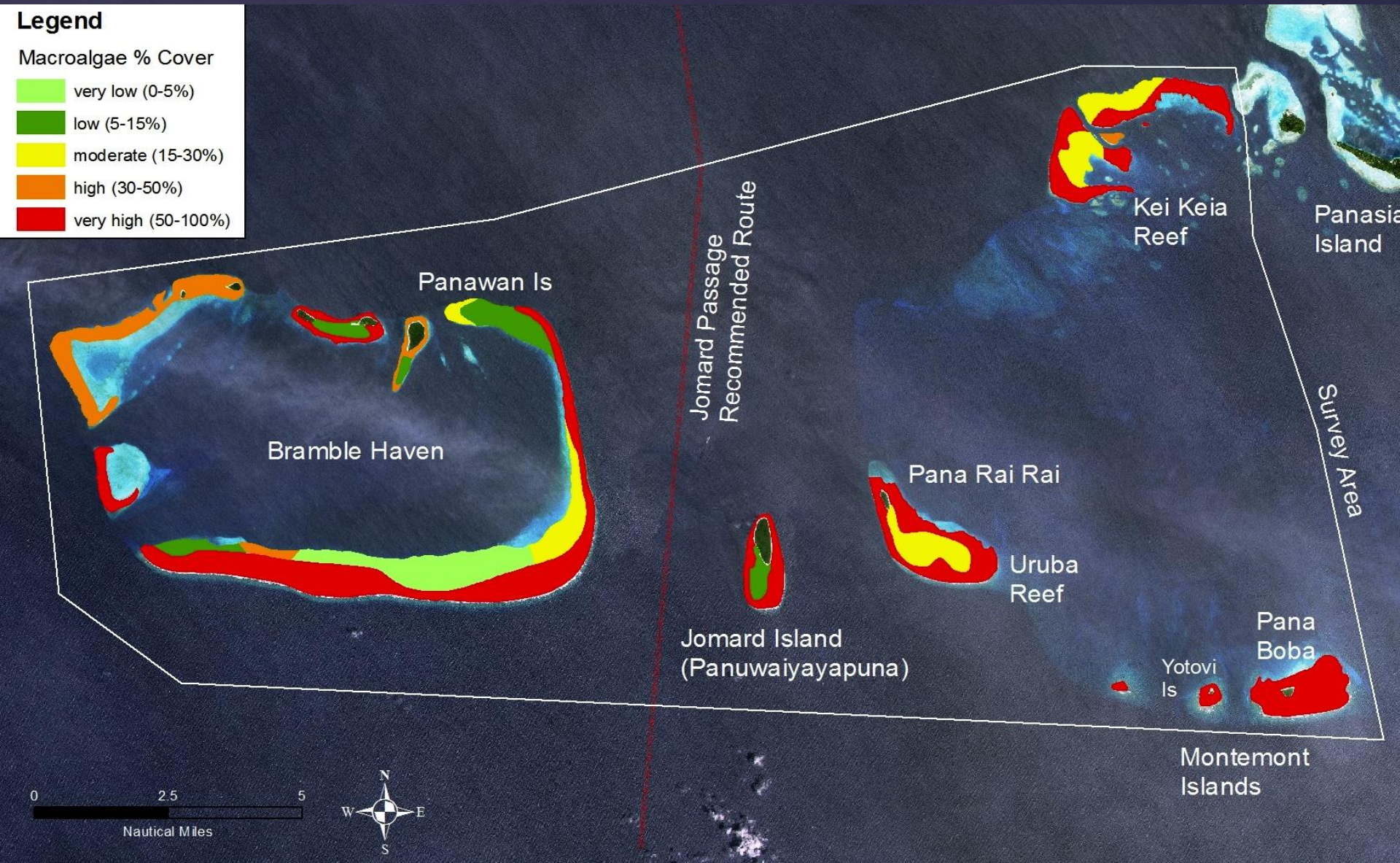
Coral % Cover

- very low (0-5%)
- low (5-15%)
- moderate (15-30%)
- high (30-50%)
- very high (50-100%)



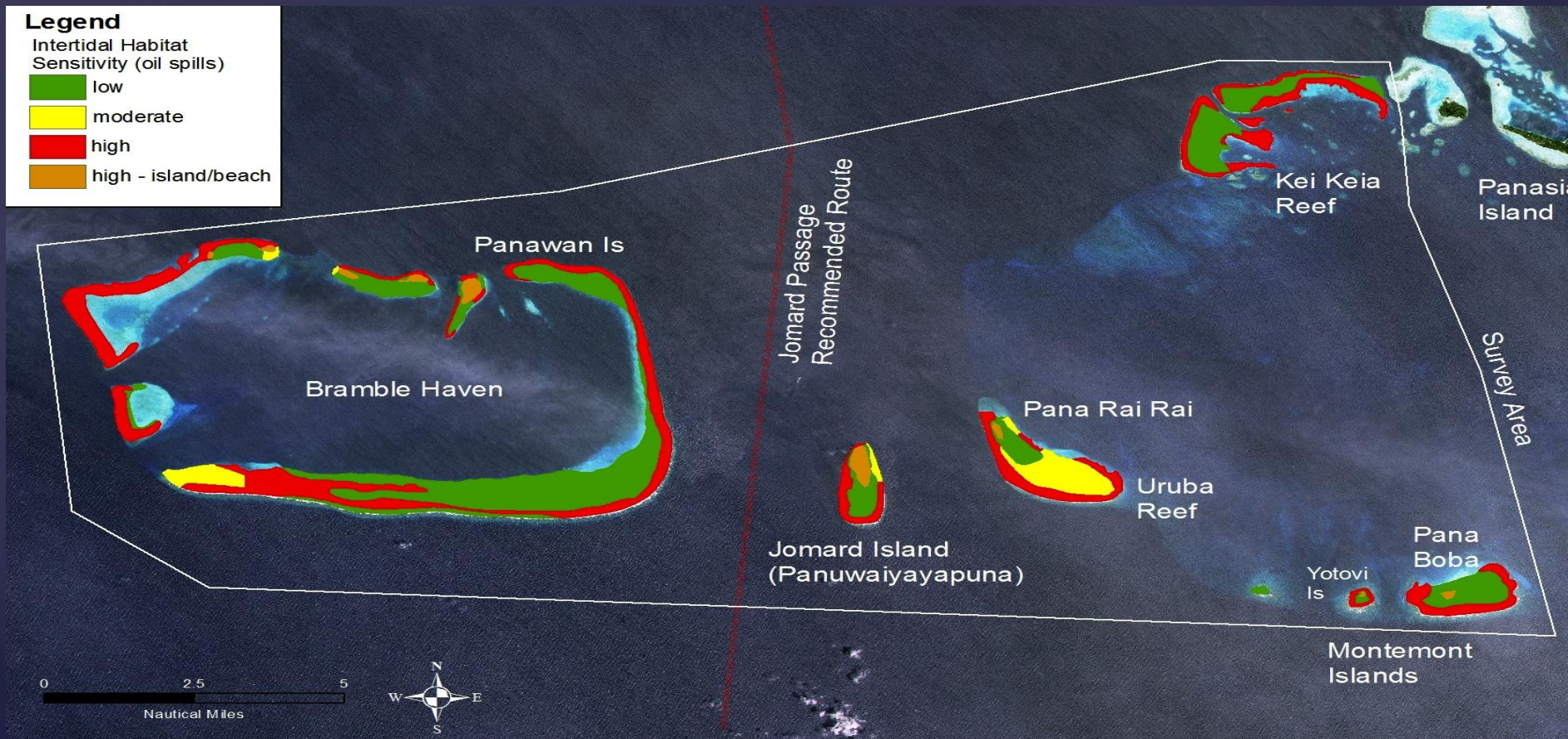
Ecological & Scientific Significance

Marine Habitat Maps - % Algae Cover

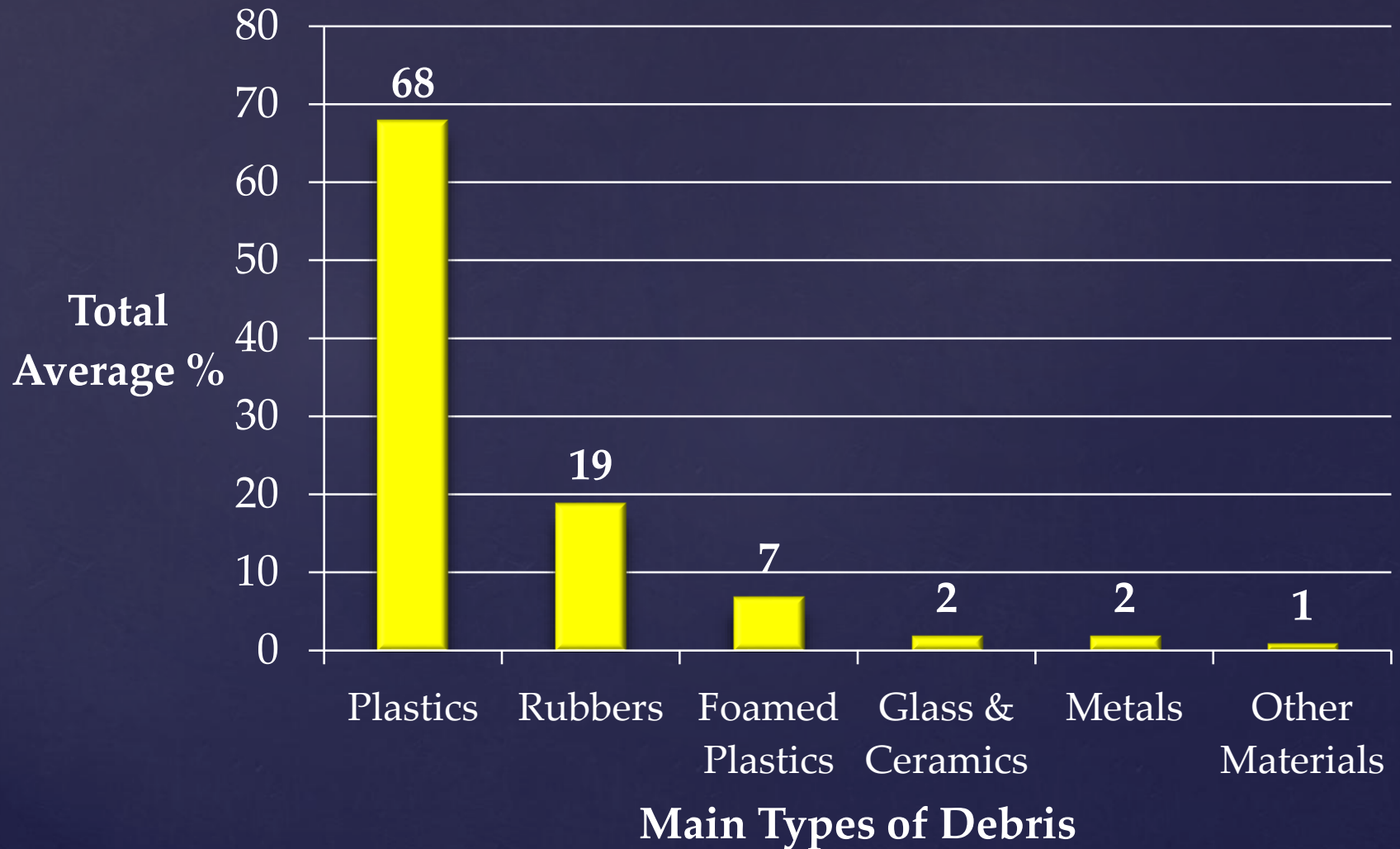


Ecological & Scientific Significance

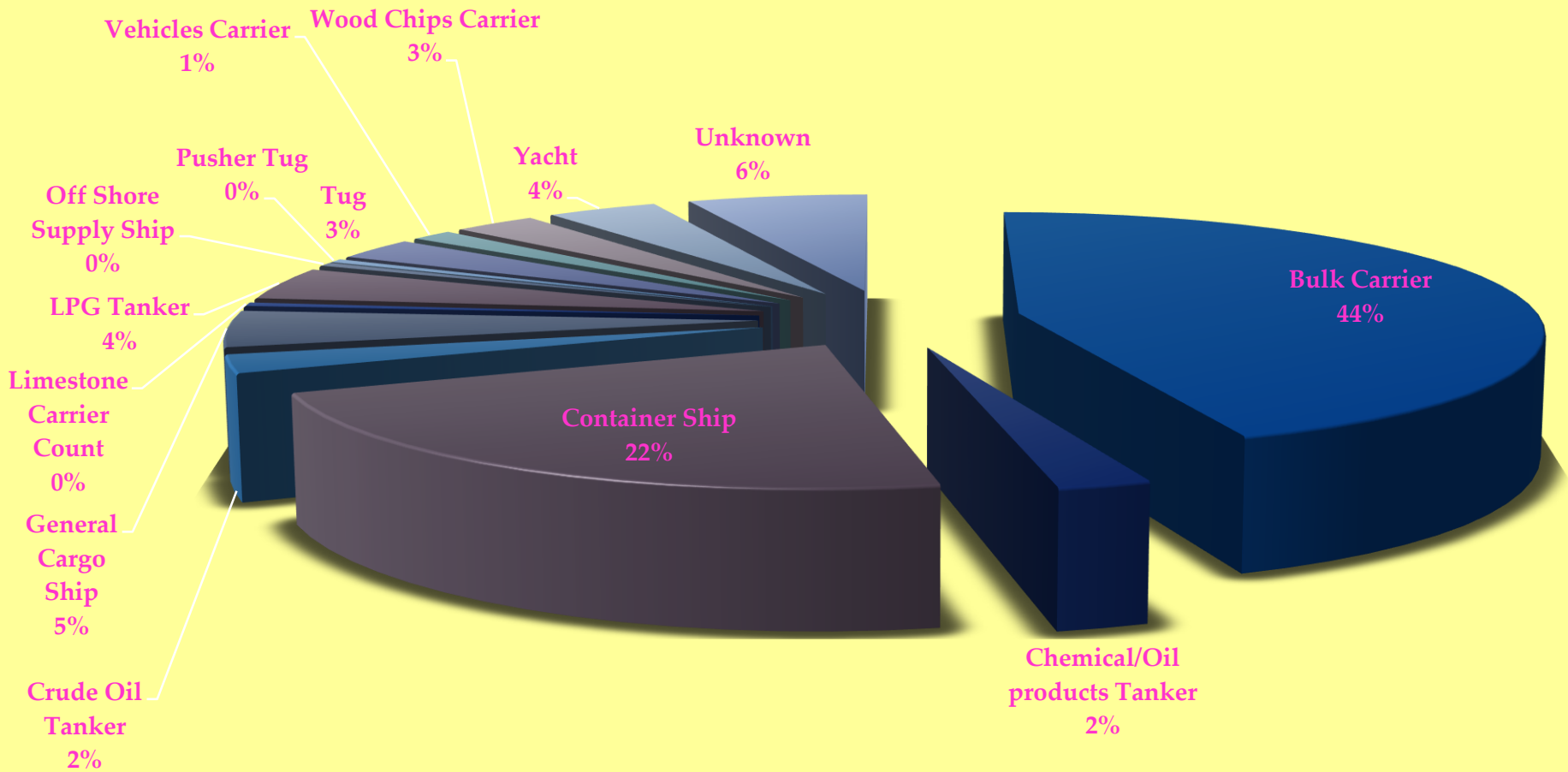
Oil Spill Sensitivity Maps



Main Taypes of Debris Vs Total Average %



Vessels Through Jomard Entrance >8500/year

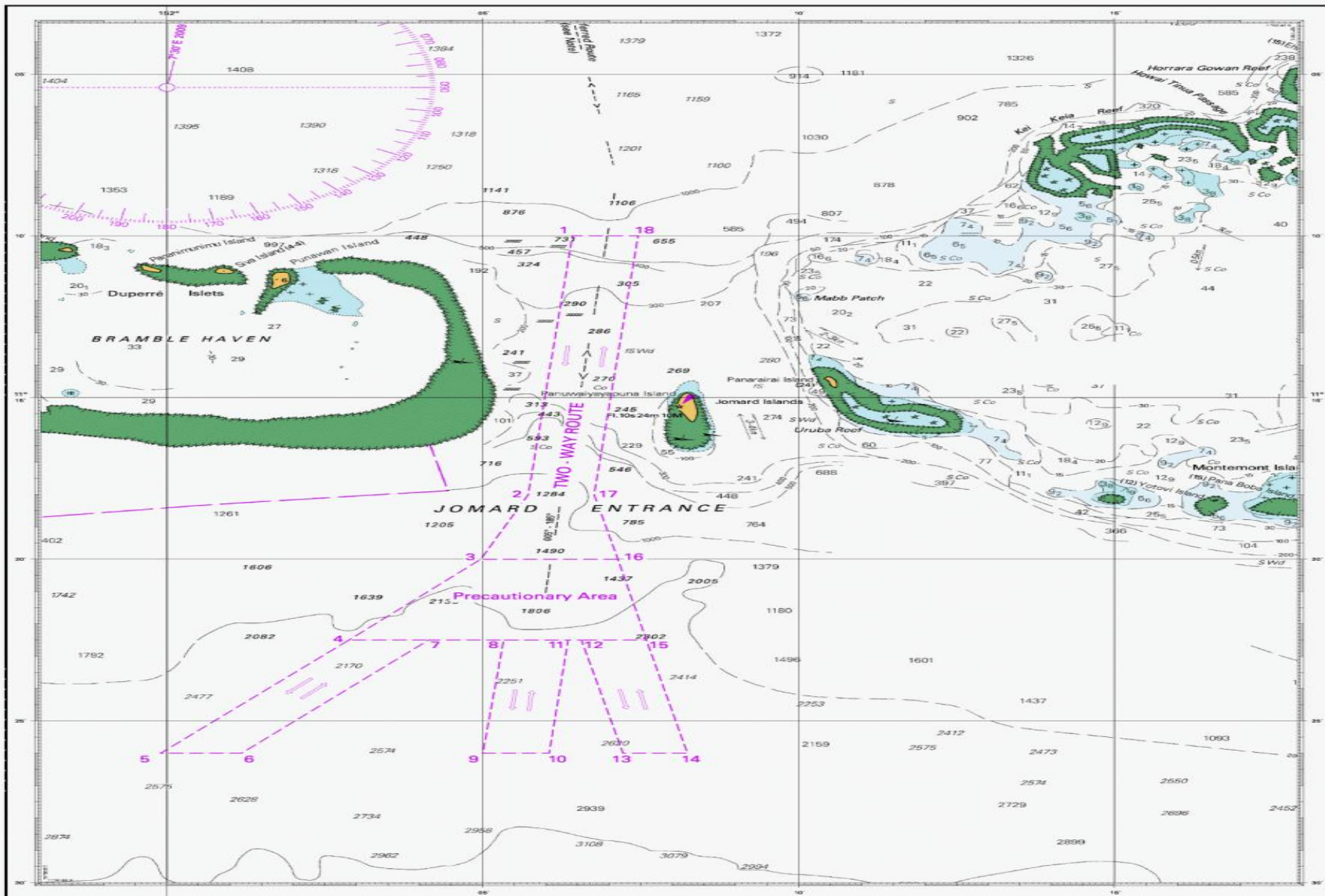


Outcome

Measures Taken As a Result of the findings from the Risk Assessment.

This is to protect the Marine Environment and the coastal communities from the risks and adverse effects of unregulated shipping, in particular, from International Transit Shipping

IMO Designation of Traffic Separation / Two-Way Route at Jomard Passage – Effective 1st June 2015



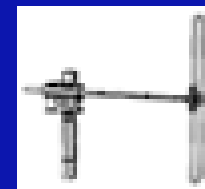
PNG Coastal Monitoring Stations in

PNG - Sensors

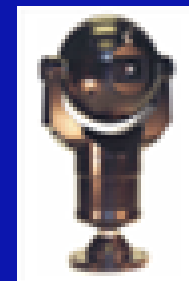
Radar Sensor – 9ft radar sensors



AIS Receiver, VHF Antenna – To allow detection of AIS targets



CCTV – Robust CCTV configured to provide surveillance of vessels transiting



Weather Station – real-time meteorological data –
barometric pressure, humidity, temperature,
precipitation, wind direction & speed



Submission to the IMO MEPC 70th for Designation of the Southern Coast of PNG's Milne Bay Province – Jomard Passage as a Particularly Sensitive Sea Area (PSSA)

- IMO – MEPC 70th PSSA Designation in October 2016
- 14th in the World & 2nd in the region (Great Barrier Reef & Torres Strait-Australia) & 1st within the Pacific Island countries.

MAP SHOWING LOCATION OF THE PSSA DESIGNATION AT JOMARD ENTRANCE, PAPUA NEW GUINEA

PSSA Area

PAPUA NEW GUINEA

Port
Moresby

AUSTRALIA

Coral Sea

No.	Latitude	Longitude
1	11°10.00'S	151°53.00'E
2	11°26.00'S	151°59.90'E
3	11°26.00'S	152°08.24'E
4	11°23.00'S	152°13.00'E
5	11°10.00'S	152°13.00'E

Designated PSSA Area



Conclusion

- **Highly vulnerable and possess huge risks from increased International Shipping**
- The Risk is increasing due to trade growth between Australia and its North Asian markets
- **PNG PSSA status obtained from IMO in the MEPC 70 -14th in the World & 2nd in the region (Great Barrier Reef & Torres Strait-Australia) and 1st in the Pacific Islands .**
- The IMO Designation of 2-Way Route at Jomard Passage used as APMs. Also looking at introducing other additional Associated Protective Measures (APMs).
- **A marine park concept is being canvassed by the PNG Government.**
- PNG willing to assist if any Pacific Island countries wishing for PSSA in their waters.



Thank You