

Potentially Polluting Wrecks in the Pacific

Heads of Maritime and Pacific One Maritime Framework Meeting
Nadi, Fiji 23 April 2024



Craig Forrest

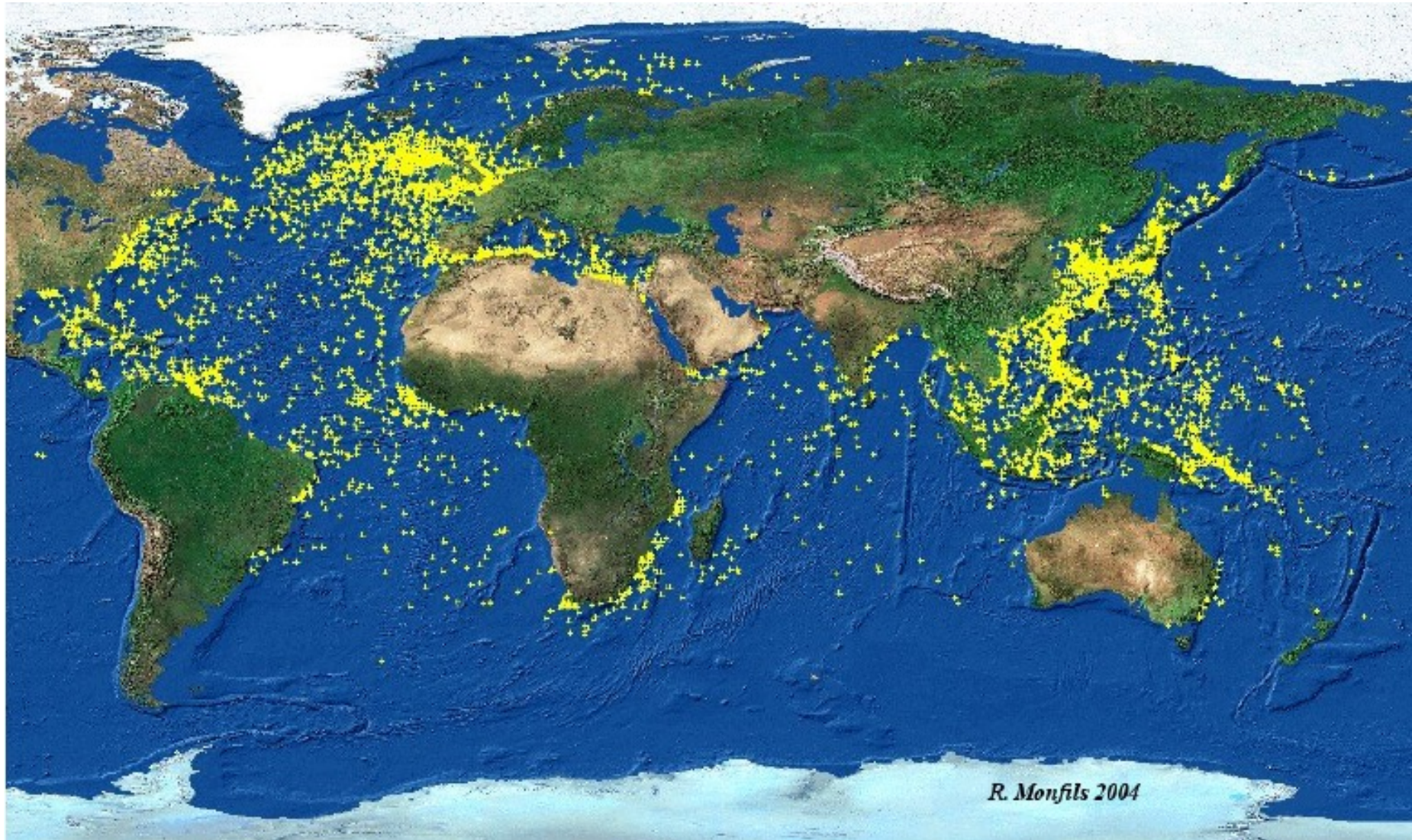
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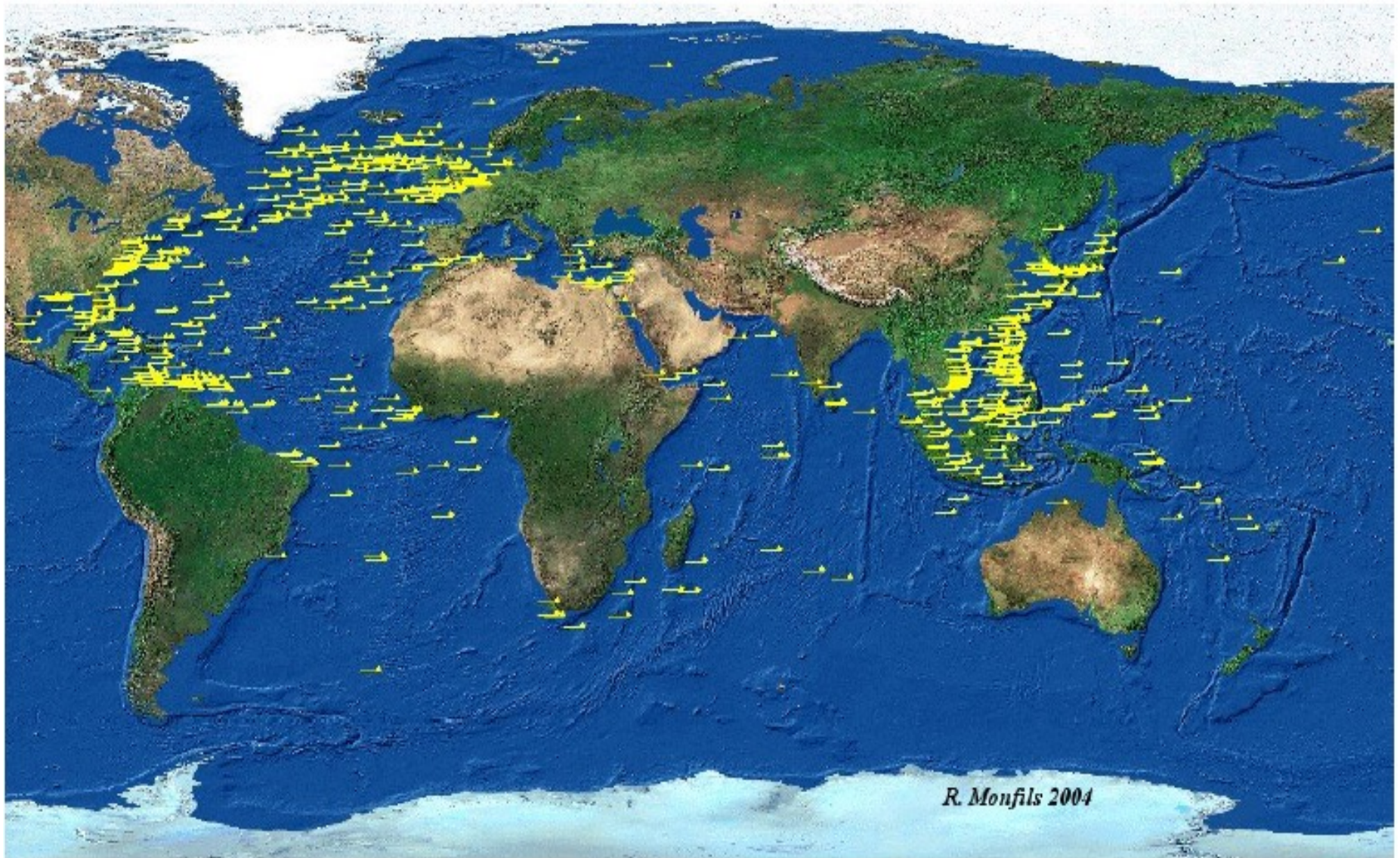
South African Delegation to UNESCO Negotiations on 2001 UCH Convention (1998-2001)

WWII sunken vessels



R. Monfils 2004

WWII sunken tankers



Federated States of Micronesia

An aerial photograph showing a large, irregularly shaped oil slick in a lagoon. The slick is a light, yellowish-brown color, contrasting with the deep blue water. The slick is elongated and has a somewhat rectangular shape with rounded corners. The surrounding water is a deep, dark blue. The sky is overcast with grey clouds. The overall scene is a stark contrast between the natural environment and the man-made pollution.

Yap State, FSM - Oil slick observed in August 2001
Environmentally sensitive lagoon
Ban of fishing resulted in significant local hardship

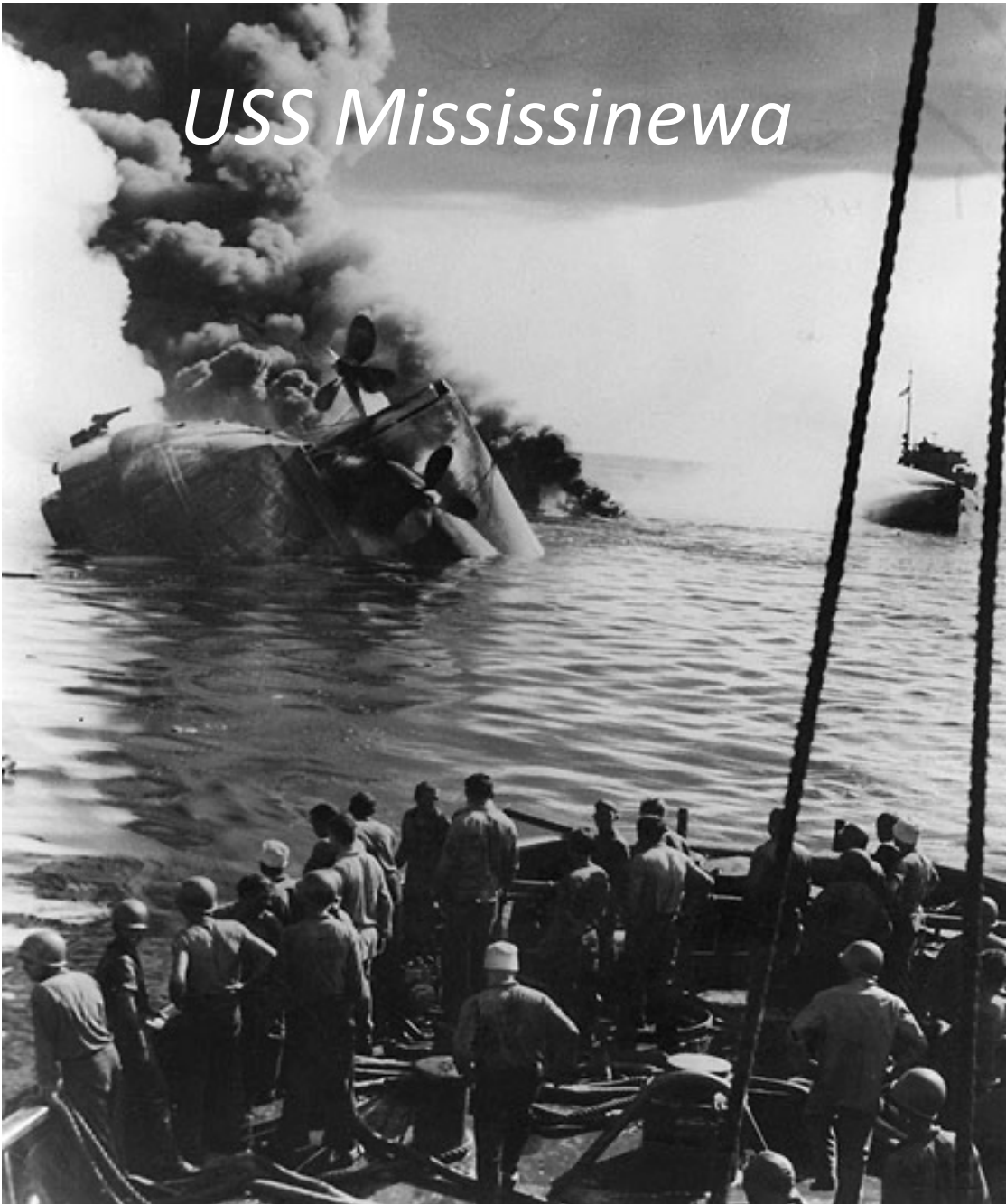


Photos source NavSea/PCCII/PALCOL

USS Mississinewa



USS Mississinewa



**US Naval Oil Tanker
Sunk in 1944 by
Japanese Keiten
(manned suicide
torpedo)**

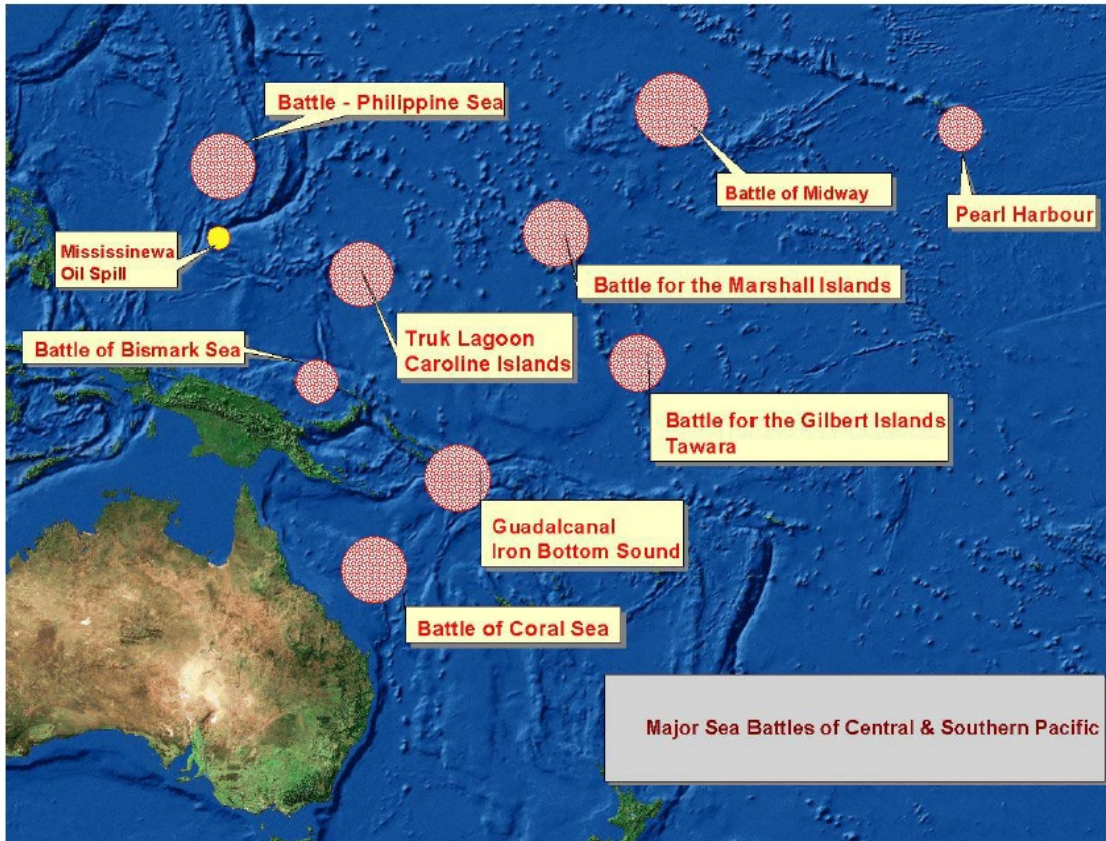
**Loss of 63 US naval
personnel and
Japanese naval
pilot**



cost approximately \$6 million to
remove 2 million gallons - sold in
Singapore to be recycled



SPREP



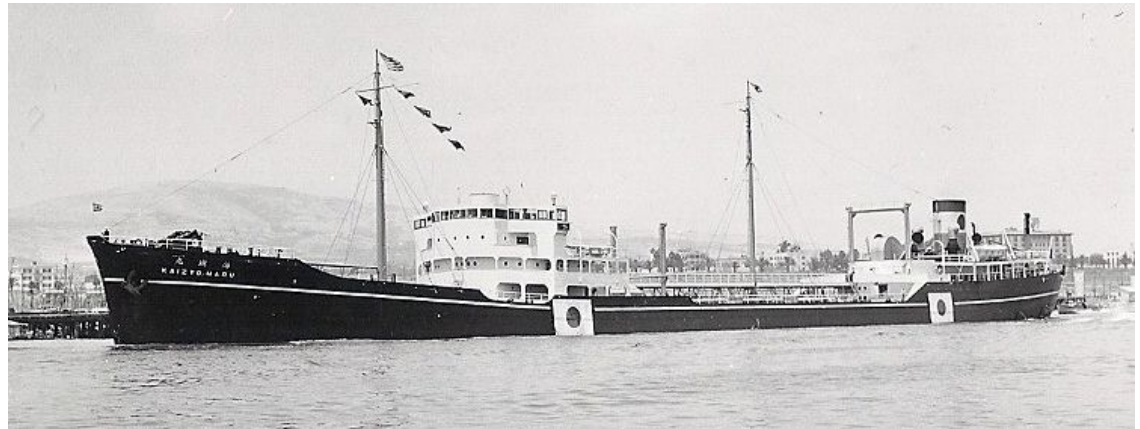
- 2002 Regional Strategy to Address Marine Pollution from World War Two Wrecks
- Undertake an initial hazard assessment – identifying and locating wrecks

Scale of the potential threat

- **South Pacific Regional Environment Program (SPREP) WWII wreck strategy program**
- **Database :**
- **3,800 vessels lost in Pacific and East Asia**
- **totalling about 13 million tons of sunken ships**
- **including 330 tankers**
- **Predominantly Japanese (86%) and USA (11%)**



Hoyo Maru in Chuuk

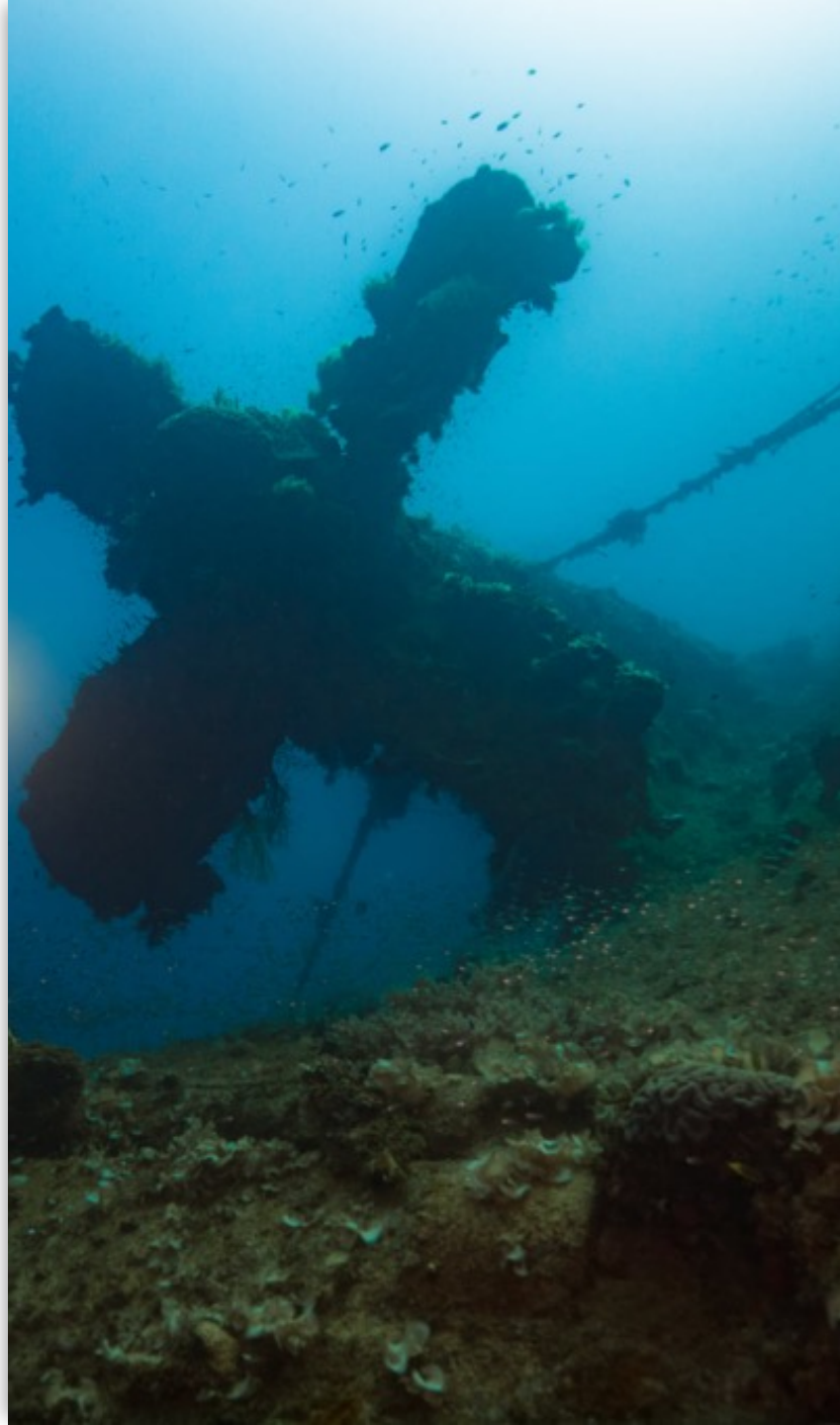


In 1940, merchant tanker HOYO MARU sunk at Chuuk in February 1944.

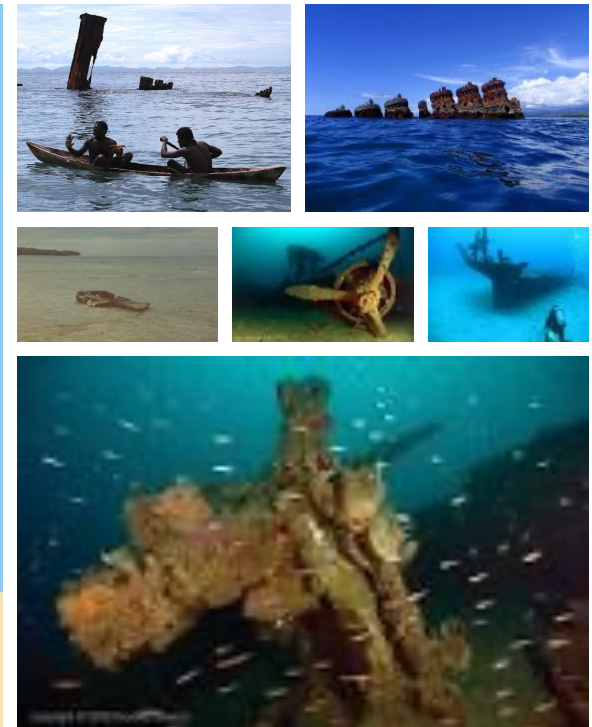
2009 oil was reported leaking from the wreck resulting in SPREP and the Chuuk EPA investigation and report that concluded that potentially polluting wrecks 'pose a grave and imminent danger to the people, marine and coastal environments, tourism and fisheries of the region.'

FSM - Chuuk

- In 2011, FSM appealed to the UN General Assembly for immediate assistance for help with the WWII shipwrecks in Chuuk Lagoon, describing them as “ticking environmental timebombs.”
- In 2017, the Japanese Mine Action Service (JMAS) responded by beginning a mission to investigate these wrecks revealing the scale of the threat and the urgent need for increased collaborative action before they collapse.
- 2022 The Australian Government partnering SPREP and the Major Projects Foundation committed AUD\$2.12 million to complement JMAS and provide technical expertise and equipment.



Warships and aircraft in Solomon islands



65 Japanese, 44 US, 1 Australian and 1 New Zealand wreck and the remains of 1,120 Japanese and 330 US aircraft

The impacts of marine pollution from PPWs include:

- Loss of wildlife populations, including important fish stocks.
- Damage to sensitive coastal and marine ecosystems (e.g. mangroves and coral reefs)
- Threats to coastal communities, including food security, livelihoods and habitability
- Possible direct threats to human health due to the presence of hazardous and noxious substances (HNS), unexploded munitions and through ingestion of chemicals within the food chain.

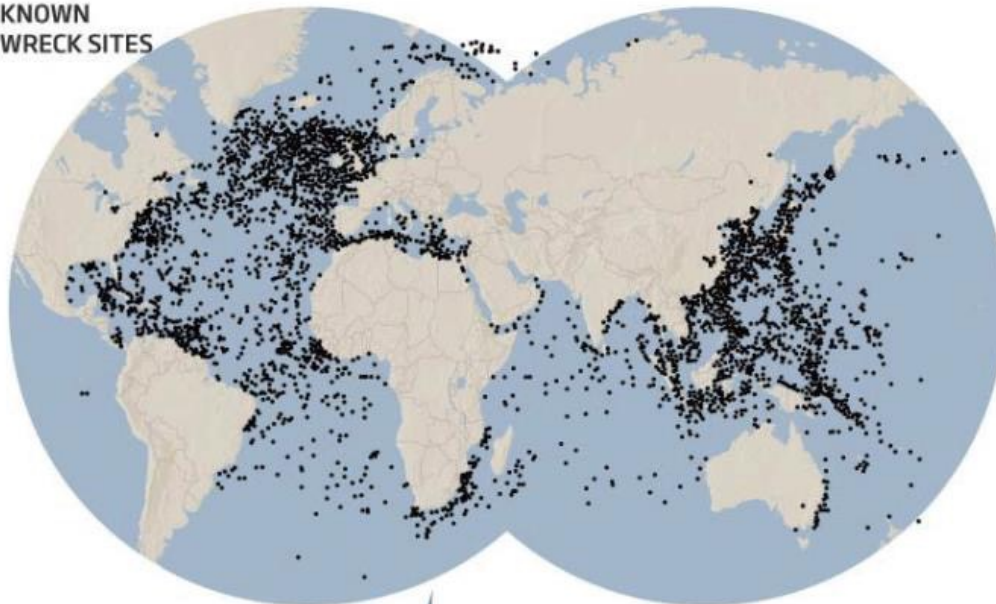


Rusting time bombs

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There are over 8500 potentially polluting wrecks lying on the seabed, nearly 1600 of which are oil tankers. Most of them sank during the second world war

KNOWN WRECK SITES



Exxon Valdez
tanker spill
1989



~40,000
tonnes



Deepwater
Horizon
2010



~1.1 million
tonnes

ESTIMATES
OF THE OIL REMAINING
IN SUNKEN VESSELS

**2.5 to 20 million
tonnes**

**CLEAN-UP
COSTS**

**\$2300 to \$17,000
per tonne**

SOURCE: SEA AUSTRALIA

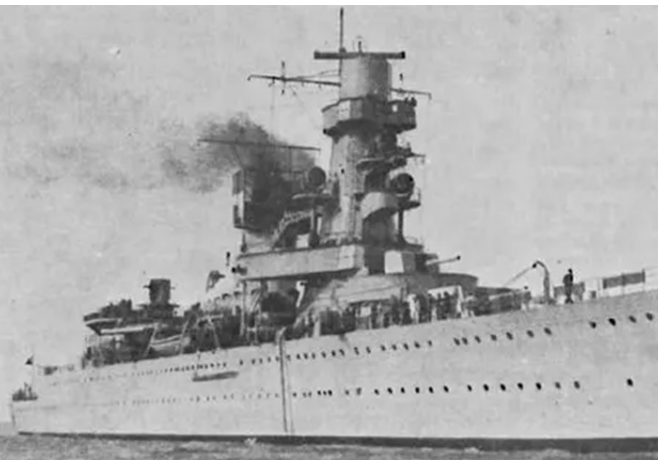


- ‘ticking time-bombs’ - pollution from PPWs is expected to reach its highest levels within ten years, due to continued structural deterioration of the sunken vessels
- Responding to pollution from PPW is reactive and expensive, is not coordinated globally and results in high costs for inefficient emergency response and intervention
- Without proactive actions, it is estimated that dealing with pollution from these wrecks could cost up to \$340 Billion, with immeasurable environmental damage, threats to marine life and potentially disastrous impacts on ocean economies and coastal communities.



PPW – legal challenges

- Uncertainty about who is responsible for dealing with the PPW problem
- Uncertainty over scope of property subject to some peace treaties
- Uncertainty regarding scope of sovereign immunity
- Many wrecks are located in international waters, EEZ or territorial sea
- Uncertainty in relation to scope of coastal states right to protect itself from pollution threats
- Excluded from Salvage Convention, Wreck Removal Convention and parts of UNCLOS
- Excluded from the UNESCO Underwater Cultural Heritage Convention
- No international recognition of maritime war graves



PROJECT TANGAROA

POTENTIALLY POLLUTING WRECKS

A Global Framework for the Near- and Long-Term Assessment, Intervention and Sharing of Data for Potentially Polluting Wrecks

Project Overview & Introduction



AIMS



- Develop an International Standard for the assessment and classification of PPWs, according to risk, considering the environmental, social and economic impacts.
- Review the methods and the technology for the assessment and intervention of PPWs and identify the technology gaps for meeting the current and future challenges of PPWs.
- Open up funding pathways and support for PPW management, supported by governments, foundations, maritime stakeholders, finance providers and other funders.
- Urgently incorporate PPWs into national and international marine spatial and contingency planning.
- Increase collaboration between nation states and stakeholders to manage the cross-border issues, including the 'flag states' (who 'owns' the vessel) and the affected coastal states, through existing frameworks, such as the IMO and the UN Treaties.
- Increased sharing of PPW data for assessment and intervention strategies and preserve the cultural heritage of the wrecks, many of which are socially and archaeologically important (including war graves).
- Campaigns to raise awareness of the PPW issue and ensure it is high on national and international political agendas.



Action on the issue of PPWs is directly linked, and aligned, to international targets, including:

The UN Sustainable Development Goal 14 targets to “prevent and significantly reduce marine pollution of all kinds by 2025”.

The UN Decade of Ocean Science (2021 – 2030) achieve “a clean ocean where sources of pollution are identified and reduced or removed”.

The UN Biodiversity Beyond National Jurisdiction Convention (BBNJ) aim to protect the biodiversity of the ocean, through the created of Marine Protected Areas (30% of the High Seas by 2030).



Thank you

Please feel free to contact me should you wish to discuss issues arising from this presentation

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