



Pacific  
Community  
Communauté  
du Pacifique

# **Royal Australasian College of Physicians Congress 2018**

## **Disruption for Healthy Futures**

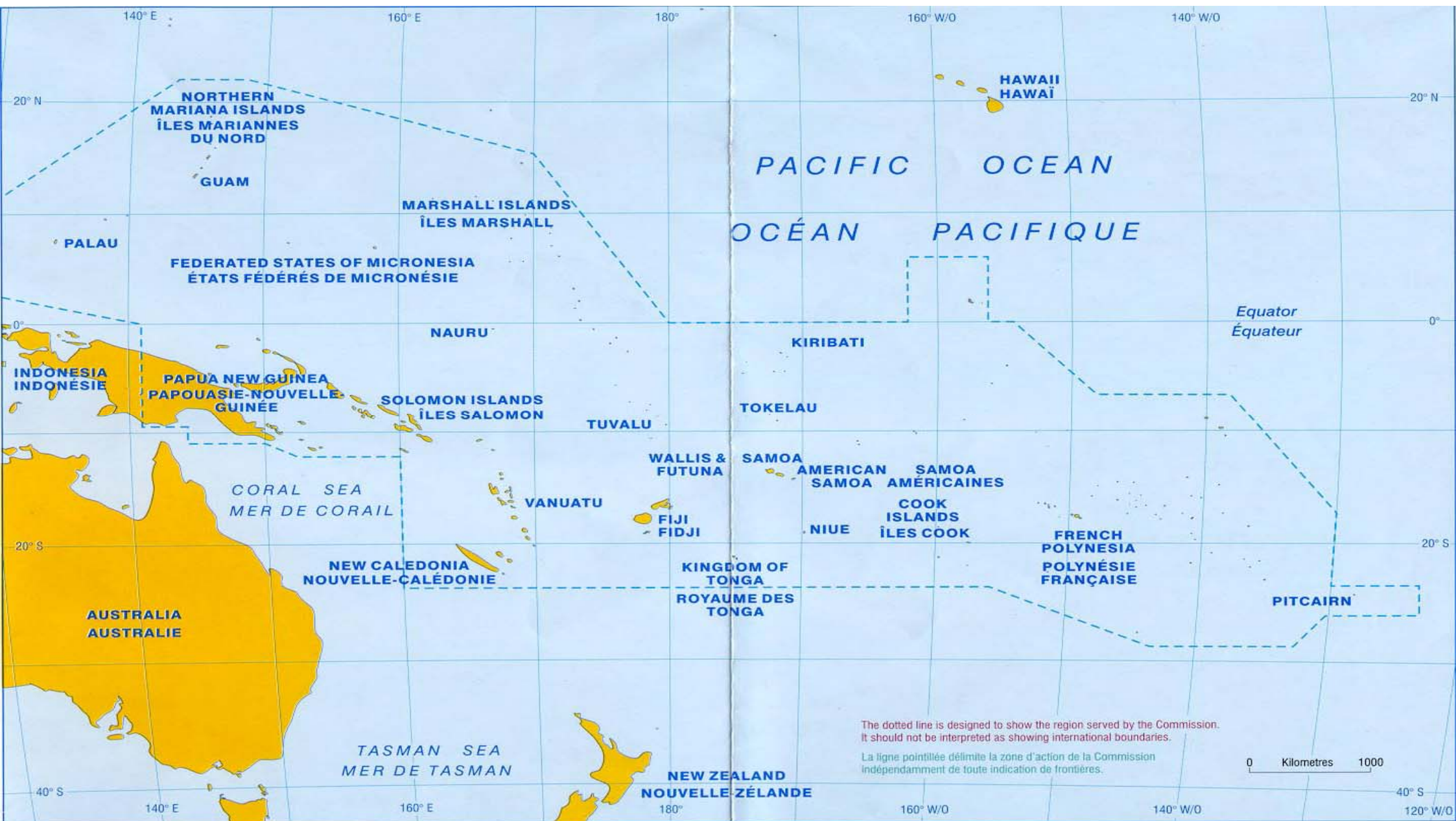
**(14-16 May 2018, Sydney)**

# OUTLINE

- **Background**
- **Impacts of Climate Change**
- **Health impacts of Climate Change**
- **Conclusions**

# MAIN MESSAGES

- **Climate change is here**, its real and impacting negatively on the socio economic conditions and cultures, lives and livelihoods of people across the globe, nowhere more acutely than small islands of the Pacific region
- **Mostly negative health impacts**; ‘multiplier’ effect
- **An issue of justice**; Pacific nations contribute 0.03% to total GHG emissions but already suffer disproportionately from adverse effects of CC
- **Moral imperative to act**; threats to the Paris Agreement can be overcome by citizen action, NGOs, corporates, philanthropists, associations, etc
- **Pacific nations making significant impact**; Paris Agreement, Oceans Conference, COP23 Fiji Presidency – maintaining momentum



# PACIFIC COMMUNITY



- The Pacific Community (SPC) was established 1947 by treaty (Canberra Agreement)
- Owned and governed by 26 Member States, including Aus, NZ, USA and France
- Scientific and technical (inter-governmental) organisation; largest portfolio of CC projects; adaptation and mitigation
- Annual budget about 100 million Euro, with over 600 staff
- Developing multi-year agreement with France to make best use of French Gov. leadership on climate change

# OUR SEA OF ISLANDS



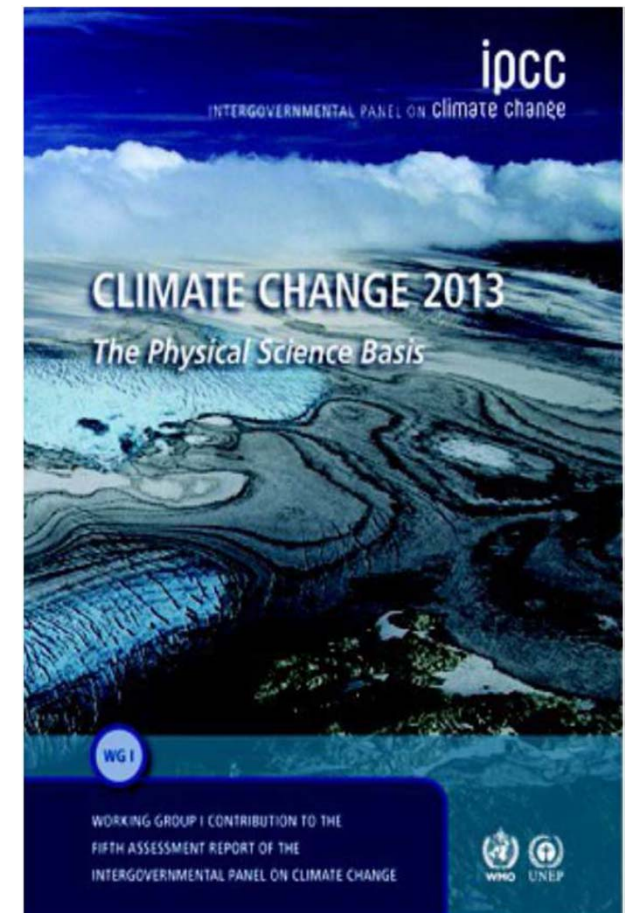
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- Pacific Ocean is the **largest ecosystem on the planet**; essential for our collective survival, supplies 2/3 world tuna, 80% protein source for Pacific people, significant tourism and economic earnings
- Covers 1/3 earth surface, 165 million sq.km
- Approximately 10 million people, mostly in Melanesia (PNG, Fiji, Solomons, Vanuatu)
- Our defining feature; we are people of the sea
- Pacific people are custodians but ocean under threat from pollution, over-fishing, climate change, environmental degradation



# CLIMATE CHANGE IMPACT

- **Food security** (as a result of ocean acidification, increase in ocean temperature, changing rainfall patterns causing drought and flooding events ...)
- **Water security** (as a result of salt intrusion, drought, etc.)
- **Loss of land** (as a result of erosion, sea level rise ..) + issue of migration?
- **Loss of natural and economic base** .. and casualties (as a result of cyclones, flooding and other weather related disasters)
- **Health issues** (as a result of rising temperature, Sea level rise or weather changes)
- **Biodiversity loss** (krill, seagrass, bivalves at sea, etc.)
- **Economies** (altered tuna stock migration affecting industrial fisheries, tourism, ) with high costs upon small island countries



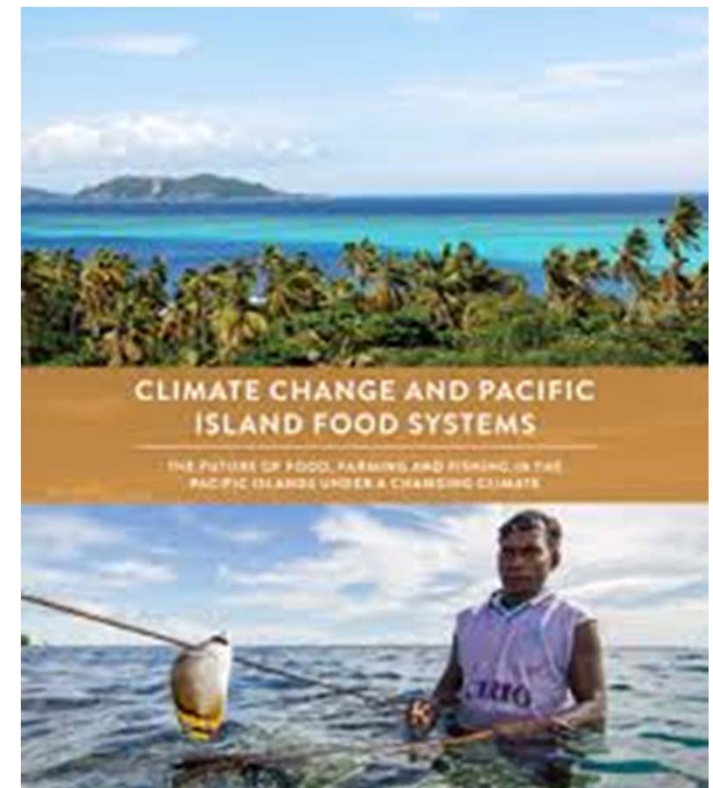
# CLIMATE CHANGE IMPACT

- **Extreme weather events** by 2030 (more hot days, extreme rainfall, intense tropical cyclones in South Pacific basin, may decrease in the North)
- **Sea level rise** (est. 0.26 – 0.98 metres) by 2100 relative to 1986-2005
- **Ocean acidification** – increased frequency and severity of coral bleaching proportional to emissions scenario
- **Increased risk of weather-related disasters** eg coastal erosion, salt water inundation, storm surge, drought, worsening water scarcity, land loss, food security risks
- **Progressive long-term degradation of natural environment**, biodiversity, critical ecosystems, (eg coral reefs), social and economic systems, contribute to displacement of people
- **Increased vulnerability of island communities**, constrains development



# IMPACT ON HEALTH

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Healthy - Dec 2014

Dying - Feb 2015

Dead - Aug 2015



# A VULNERABLE REGION

Pacific region is highly vulnerable to natural disasters

PNG, Fiji, Solomons, Vanuatu, Tonga among top 15 high risk countries for floods, droughts, TCs, earthquakes, tsunamis

Top 30 includes Vanuatu, Niue, Tonga, FSM, Solomon Islands, Fiji, Cook Isl, Palau, Samoa

Cyclone Heta Niue 2004



# COSTS OF DISASTERS

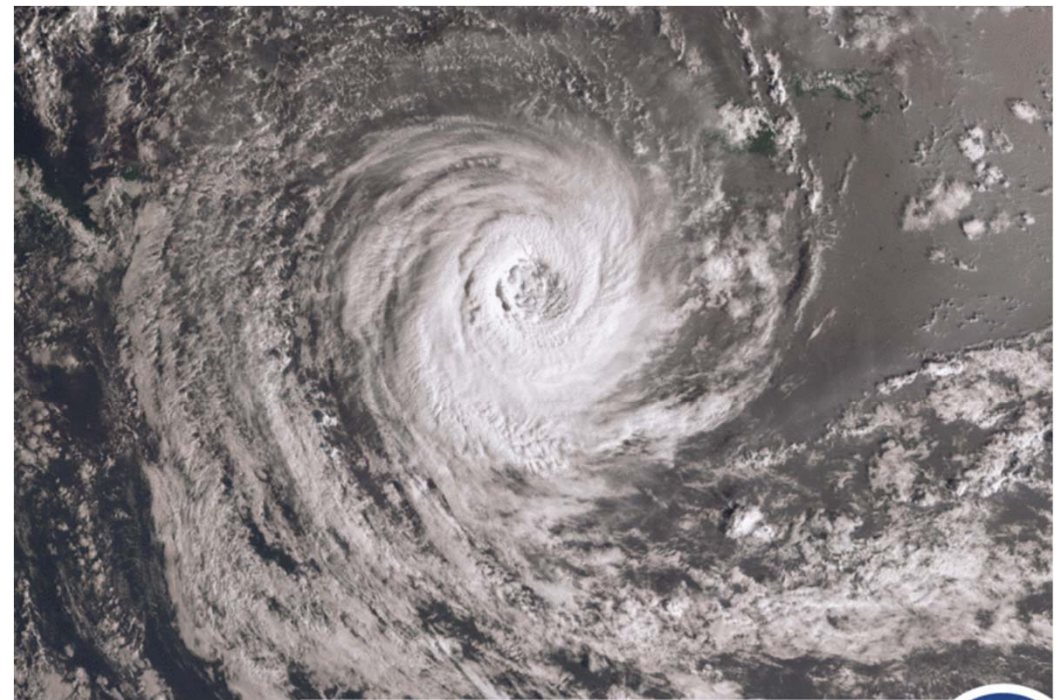
Disaster	Disaster Effects USD Million	%GDP
2009 TSU Samoa	124	22
2012 TC Evan Fiji	108	2.6
2013 TC Evan Samoa	203	29
2014 TC Ian		
2014 Floods SB	107	9.2
2015 TC Pam Vanuatu	449	64
2016 TC Winston Fiji	900	20
2017 Drought RMI	5	3.4

# TC GITA 2018

TC Gita Cat 3 devastation in Fiji, Tonga and Samoa early 2018

Estimated damage in Tonga 150 million USD, 38% GDP

Significant other weather events 2018; costs yet to be determined



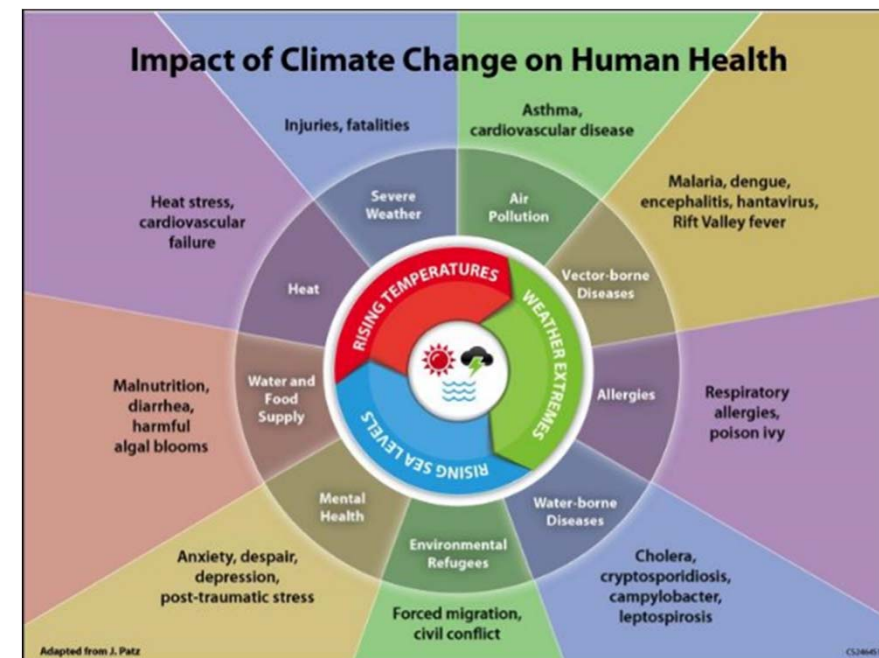
**TC GITA VISIBLE IMAGERY**

Satellite Imagery courtesy of JMA  
9am – 2pm 15/02/18



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# IMPACT ON HEALTH

- Climate change has **‘multiplier’ effect**
- **DIRECT EXPOSURES** – storms, floods, extreme heat
- **INDIRECT EXPOSURES** – compromised food, water supply, altered disease risk such as vector-borne, displacement of populations, land loss, loss of livelihoods, may aggravate NCD incidence
- **SOCIAL DISRUPTION**
- **NEGATIVE IMPACT ON ECONOMIC DEVELOPMENT**
- Impacts not fully manifest

# IMPACT ON HEALTH

- Climate change has major impact on social and environmental determinants of health; clean air, safe water, sufficient food, secure shelter
- WHO estimates 250k additional deaths annually between 2030-2050
- Estimated direct damage costs to health USD 2-4 billion/year by 2030
- Developing countries with weak health infrastructure most at risk
- Limited localised positive impacts eg fewer winter deaths, better food production
- Overwhelmingly negative effects from extreme heat, extreme weather events, rising sea levels, more droughts, floods, increased prevalence of water-borne, vector-borne diseases
- Coastal communities, Small Island communities most at risk; least able to respond

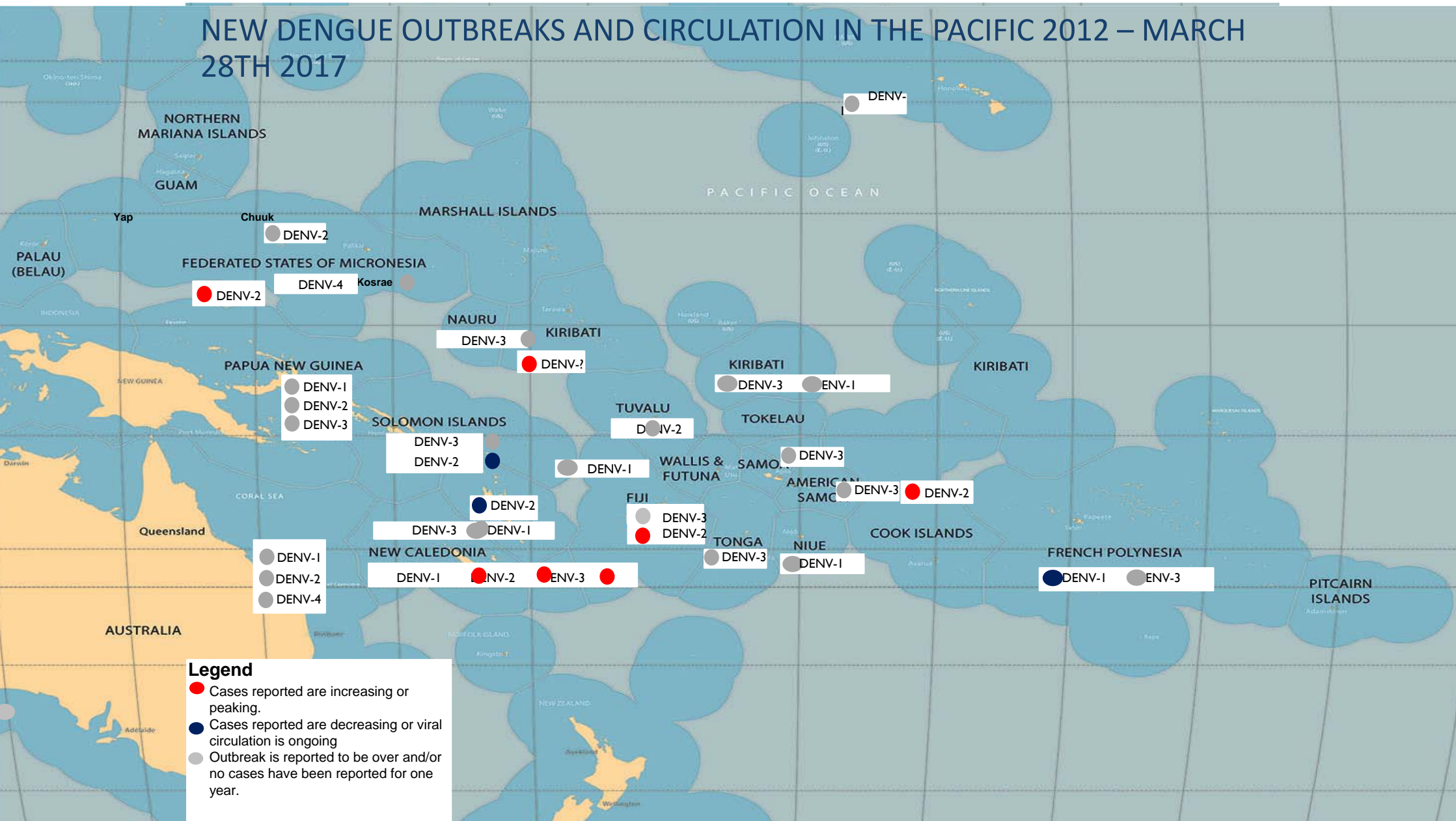
# IMPACT ON HEALTH

## Clean Water

- Half of the Pacific population does not have access to clean water
- Water sources vulnerable to contamination, salt water intrusion in low lying atolls
- Climate change likely to increase incidence of water-borne diseases, data hard to come by

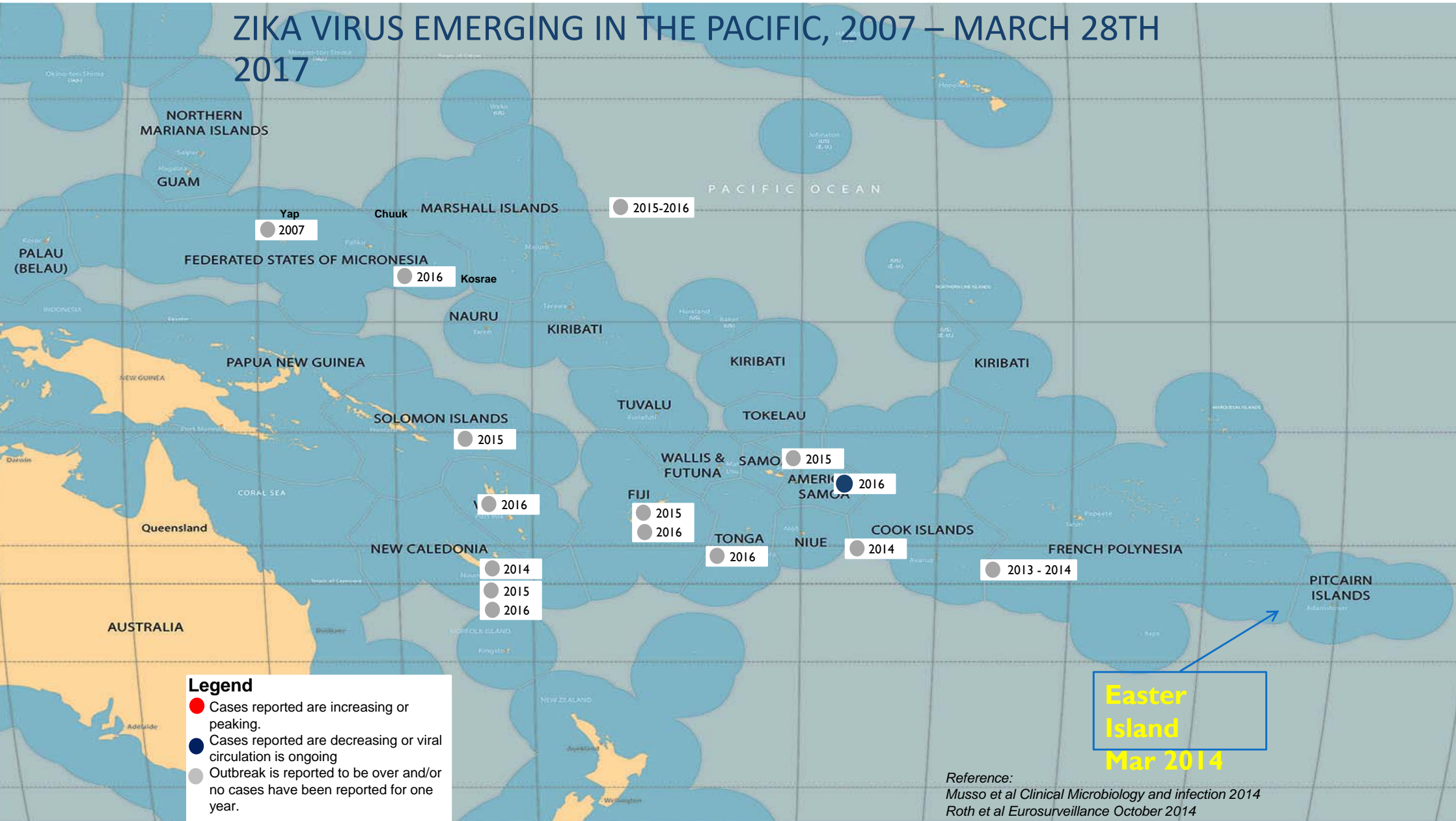


# NEW DENGUE OUTBREAKS AND CIRCULATION IN THE PACIFIC 2012 – MARCH 28TH 2017





# ZIKA VIRUS EMERGING IN THE PACIFIC, 2007 – MARCH 28TH 2017



# IMPACT ON HEALTH

## Health Systems

- Fragile health systems, facilities located in vulnerable locations in coastal areas; at high risk of damage during disasters, especially tropical cyclones
- Most need to be strengthened, better building codes, more climate resilient
- Small islands health systems most affected; least able to cope
- Constrained human resources for health, limited finances





# IMPACT ON HEALTH

## “Climate Refugees”

- Displacement of people - LSE estimates 1.7 million of 10 million displaced by 2050
- Fiji plans to relocate 63 villages; Vunidogoloa in 2012, Tukuraki in 2017
- Considerable anxiety for affected communities – their future, their lives and livelihoods, burial security, water supply, uncertainty about the future,
- Immediate effects of trauma and shock, loss, grief and long term PTSD
- Poorly understood mental health; impact on children, elderly in Pacific



# IMPACT ON HEALTH

## Support for SIDS

- WHO Special Initiative with UNFCCC, Fiji
- In 2030, all health systems in SIDS resilient alongside carbon emissions reduction by all 4 components:

Empowerment  
Evidence  
Implementation  
Resources

# PARIS UNDER THREAT?

- Pacific nations made impressive contribution to **Paris Agreement**; now under threat?
- Pacific Leaders commitments to renewable energy targets (**Majuro Declaration 2013**)
- **Framework for Resilient Development in the Pacific** integrating CC and disaster risk
- Fiji Co-hosting **UN Oceans Conference** June, increasing focus on ocean health



# PACIFIC LEADERSHIP

- **Leadership and strong advocacy:** Pacific small islands loud voices
- **Effective and integrated policies:** FRDP, JNAP and NDC, overall mainstreaming in national policies
- **Risk assessment and continuous monitoring** (incl. economic revenue at risk, vulnerable communities and systems)
- **Risk preparedness**
- **Taking actions:** GCF submissions and projects, insurance initiative, coastal protection and ecosystem-based initiatives





# SPC SUPPORT



- Provision of **science and knowledge** to partners and PICTs
- **Technical assistance** delivered on the ground to address CC mitigation or adaptation priorities, and mainstream climate resilience in sectors
- Promoting **multi-sectoral responses** through integrated approach
- **Assisting Disaster Risk Management efforts** for preparedness and disaster plans
- **Gender and Human Rights focus**, ensuring people's realization of their fundamental human rights
- **Engaging partners, mobilizing leaders and empowering all actors of the Pacific**, through convening, training and capacity building, and fundraising support

# CONCLUSIONS

Climate change is having major negative impact on small island environments, communities, lives and livelihoods

Full impact of climate change on health yet to be fully manifest; significant direct effects on human health from disasters, 'multiplier' effect

Implementing the Paris Agreement is the priority for our region; new partnerships

