

PRP Disaster Risk Reduction in the Asia Pacific

Client Organization: Department of Defense, Center for Excellence in Disaster Management & Humanitarian Assistance

Client Website: <https://www.cfe-dmha.org>

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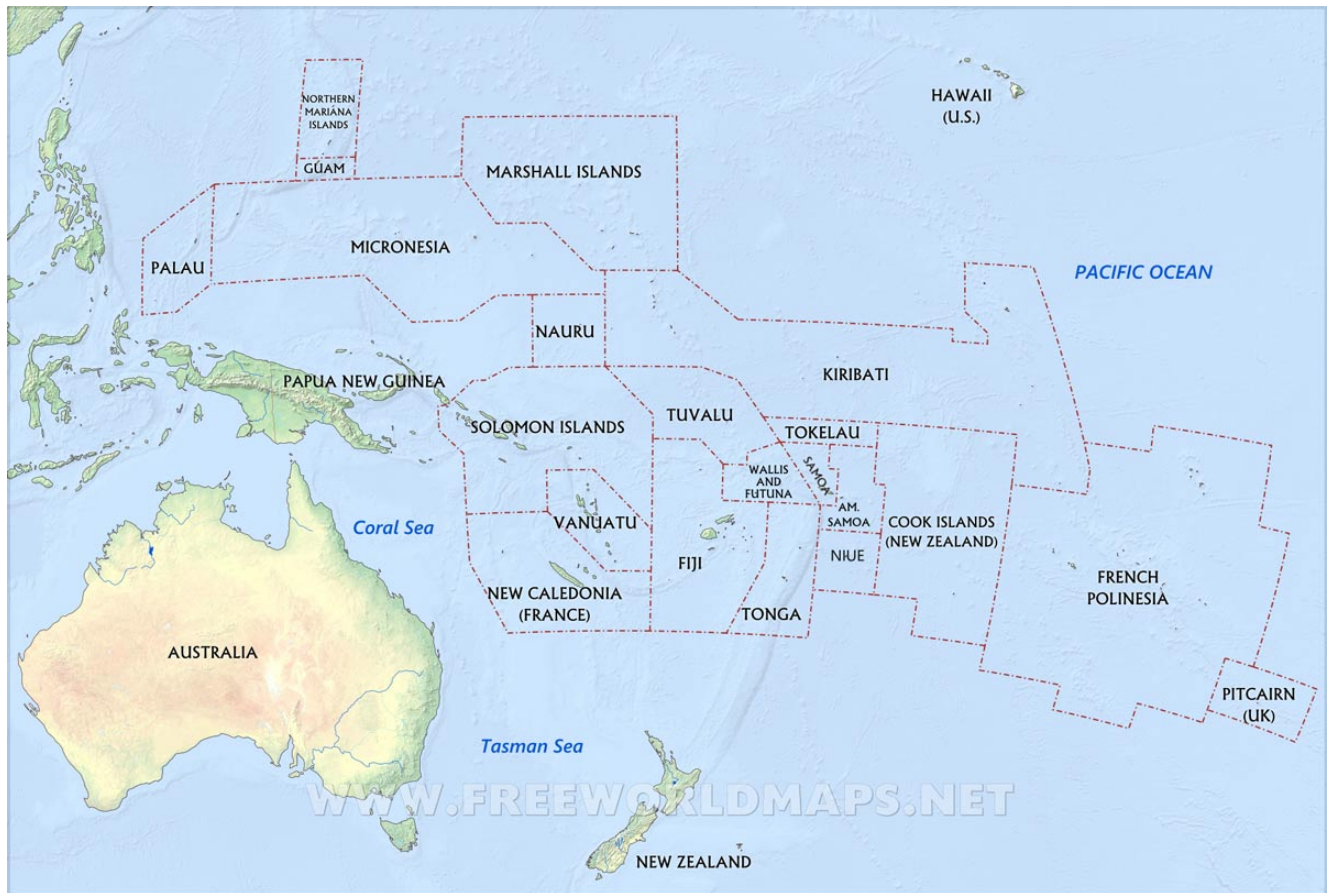
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Background:

This year long capstone course on behalf of the Center for Excellence in Disaster Management & Humanitarian Assistance (CFE-DM) will carry out a series of evaluations on countries in the Asia Pacific on their natural disaster preparedness, specifically the region of Oceania. It will include field visits to the region for consultation with disaster management professionals. The aim of the capstone course is to evaluate the adequacy of preparations for climate-related natural disasters in a number of countries of concern and the degree to which outside actors shore up local resiliency. The reports will review key geographic sources of vulnerability and identify priority action areas for the US to address climate-related risks in the Asia Pacific.

Objective:

Research Area: Oceania (which includes the subregions of Australasia, Melanesia, Micronesia, and Polynesia) encompasses a number of island countries that are among the most vulnerable to changes in sea level and extreme weather events. Some of these countries such as Kiribati and Tuvalu may in a few decades become increasingly uninhabitable due to salinization of the water supply and coastal inundation. In this capstone course, we are generally interested in the degree of disaster preparedness of countries in Oceania to changing weather patterns. Between Fall 2019 and Spring 2020, we aim to explore a variety of topics to (1) assess the vulnerability of the countries to changes in their exposure to extreme weather events and a changing climate, (2) what steps they have taken to prepare for these changes and (3) the implications for the United States and what it can do to assist the region in minimizing adverse consequences.



Possible research projects include:

Hot spot mapping of vulnerability - This would include GIS mapping of physical exposure to extreme weather events in Oceania and demographic, social, and political attributes of vulnerability building on previous methods developed at the University of Texas as part of its Department of Defense-sponsored projects under the Minerva Initiative. See <http://strauss.tacc.utexas.edu/ccaps/dashboards/showSuperDashboard/3099040>

Country profiles - This could be accompanied by hot spot maps and a short narrative discussion of select countries in the region and cover physical exposure, general governance, disaster preparedness, and international aid for adaptation/risk reduction. The template would follow those developed under the University of Texas' DOD-funded CEPsa program. See <https://www.strausscenter.org/cepsa-content/cepsa-country-briefs.html>

Disaster risk reduction planning - This could evaluate the degree to which countries have adequate plans in place for disaster risk reduction, building upon previous methodologies deployed at the University of Texas as part of two Department of Defense-funded projects on Africa and South and Southeast Asia under the Minerva Initiative. See <https://www.strausscenter.org/ccaps-news/institutional-capacity-for-natural-disasters.html>

Water and agriculture - Given the threats to fresh water from salinization and coastal inundation, thematic inquiries into water and agriculture vulnerabilities might also be explored.

Existential threats, managed retreat/settlement - A fundamental question for Oceania is how to prepare for the existential challenge of a changing climate, rising seas, stormier weather, and how local and regional actors think about the managed retreat/resettlement issue, what they want, what is possible, the legal terrain for visas/etc. Tuvalu bought 5000 acres in Fiji. New Zealand has created new visa categories for Pacific Islanders.

Oceania and U.S. Grand Strategy – We may also explore anchoring Oceania in wider geopolitics of US-China grand strategy/tensions. Would US efforts to address disaster vulnerability in the region be a way of developing soft power resources relevant to wider geostrategic preoccupations?

US Assets - What US assets in the region are vulnerable to climate change and what needs to be done to shore up their vulnerability?

We will settle on the final number of research projects after consultation with the students and CFE-DMHA. There will likely be at least two research reports delivered per semester.

Analytical Methodology:

Outcome: (Reports) - These research projects support the efforts of the Office of Under Secretary of Defense for Policy and the Department of Defense Center for Excellence in Disaster Management and Humanitarian Assistance to effectively assist countries in Oceania's capacity building in disaster response and civil-military coordination. Results from this project will enable countries in Oceania to develop greater self-sufficiency, resiliency, and ability to support national and regional disaster management.

Tasks:

- The team will engage in archival research and interviews with key stakeholders. (Stakeholders are all security forces and all civilian organizations with expertise in DM, the non-government and international government Humanitarian Community actively supporting Oceania's DM operations, and partner nation DM organizations (e.g. U.S. Missions in the region).
- Produce final reports and a Power Point presentation of the findings.
- Possible ministerial-level and COM office calls to discuss findings (including proposed ways ahead)

Deliverables and timetable for the client:

General Timeline:

- Detailed work plan: last week of September, 2019
- Draft report(s) fall semester outlines: First week of November, 2019
- Draft fall report(s): December, 2019
- Field work: December-January 2020
- Revised fall reports: End of January/Beginning of February 2020
- Draft spring report(s) outlines: End of February, 2020
- Possible additional spring break travel: March, 2020
- Draft spring report: early April, 2020
- Presentation of key findings: End of April, 2020
- Final report: First week of May, 2020
- Provide an article for the CFE-DM Liaison Magazine (if possible)

Additional guidance on grades and final projects

You will be assessed on the basis of your contribution to two group projects for which the group will receive a collective grade. Each of which will count as 40% of your grade. The first group project will be due at the end of January and the second will be due at the end of April. You will also have three blog posts per semester of roughly 1,000 words each for which you will be individually assessed that will collectively count 20% of your grade.

Digest of the Fall Semester

1	September 3	Introduction: Background on Climate Change and Security
2	September 10	US Interests in the Asia Pacific/Oceania Disaster Risk Reduction Conference Call with Funders
3	September 17	Climate Security in Oceania – Small Island Nations Discuss topics
4	September 24	Documentaries Fall topics decided
5	October 1	Group Meetings Busby in Europe
6	October 8	Climate Security in Oceania – Water and Agriculture
7	October 15	Climate Security in Oceania – Managed Retreat/Migration
8	October 22	Approaches - Hot Spot Mapping
9	October 29	Approaches – Disaster Risk Reduction Evaluation
10	November 5	Rotating Meetings with Busby on Plan of Attack for Paper
11	November 12	Class Demand Topics/Group Meetings
12	November 19	Class Demand Topics/Group Meetings
13	November 26	Class Demand Topics/Group Meetings
14	December 3	Winter Field Work/Draft Paper Presentation

Readings for the Fall Semester

1	September 3	<p>Introduction: Background on Climate Change and Security</p> <p>Wallace-Wells, David. 2017. "The Uninhabitable Earth: Annotated Version" <i>New York Magazine</i>. (URL version better) http://nymag.com/intelligencer/2017/07/climate-change-earth-too-hot-for-humans-annotated.html</p> <p>Busby, Joshua. 2018. "Warming World: Why Climate Change Matters More Than Anything Else." <i>Foreign Affairs</i>. 49-55.</p> <p>Busby, Joshua "Reducing Greenhouse Gases Is a Security Issue," <i>E-IR</i> June 7, 2019 https://rdcu.be/77ry</p> <p>Busby, Joshua "Taking Stock: The Field of Climate and Security," <i>Current Climate Change Reports</i>. 2018. https://rdcu.be/77ry</p> <p>Adger, W.N., Pulhin, J.M., Barnett, J., Dabelko, G.D., Oswald Spring, U., Vogel, C.H., 2014. 2014: Human security, in: Field, C.B., Barros, V.R., Dokken, D.J., Mach, K.J., Mastrandrea, M.D., Bilir, T.E., Chatterjee, M., Ebi, K.L., Estrada, Y.O., Genova, R.C., Girma, B., Kissel, E.S., Levy, A.N., MacCracken, S., Mastrandrea, P.R., White, L.L. (Eds.), <i>Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change</i>. Cambridge, UK and New York, NY, USA, 758-778.</p>
2	September 10	<p>US Interests in the Asia Pacific/Oceania Disaster Risk Reduction</p> <p>Conference Call with Funders</p> <p>About CFE-DMHA https://www.cfe-dmha.org/About-CFE-DMHA</p> <p>The CFE-DM Program Plan FY 19-23 https://www.cfe-dmha.org/About-CFE-DM/Program-Plan</p> <p>Director's Biography https://www.cfe-dmha.org/About-CFE-DM/Director-CFE-DMHA</p> <p>Alberto Morales Biography</p>

		<p>https://www.cfe-dmha.org/About-CFE-DM/CFE-DM-Staff/Alberto-Morales</p> <p>Framework for Resilient Development in the Pacific. 2019. 1-40.</p> <p>Pacific Resilience Meeting - Outcomes Statement. 2019. 1-2.</p> <p>Columbia University Capstone Report. Disaster Preparedness and Management in Nepal. 2018. 1-47.</p> <p>Columbia University Capstone Presentation. 1-22.</p>
3	September 17	<p>Climate Security in Oceania – Small Island Nations Discuss topics</p> <p>UNFCCC. Climate change small island developing states. 2005. 1-32.</p> <p>Barnett/Adger. "Climate Change and Atoll Countries." <i>Climatic Change</i>. 2003. 321-337.</p> <p>Barnett & Waters. "Rethinking the Vulnerability of Small Island States: Climate Change and Development in the Pacific Islands" 2016. <i>Palgrave Handbook of International Development</i>. 731-748.</p> <p>Kelman, Ilan. "Island Security and Disaster Diplomacy in the Context of Climate Change." <i>Les Cahiers de La Sécurité</i> 2006. 63: 61–94.</p> <p>Kelman, Ilan. No change from climate change: vulnerability and small island developing states. <i>Geographical Journal</i>. 2014. 120-129.</p> <p><i>Climate Reality Project</i>. "Trouble in Paradise: How Does Climate Change Affect Pacific Island Nations?" 2019 https://www.climateRealityproject.org/blog/trouble-paradise-how-does-climate-change-affect-pacific-island-nations</p> <p><i>New York Times</i>. 2017. "Island Nations, With No Time to Lose, Take Climate Response Into Their Own Hands" https://www.nytimes.com/2017/11/17/climate/islands-climate-change-un-bonn.html</p> <p><i>Washington Post</i>. "Small island nations, threatened by rising seas, want stronger action at the climate-change summit in Poland." 2018. https://www.washingtonpost.com/energy-environment/2018/12/12/small-island-nations-threatened-by-rising-</p>

		seas-want-stronger-action-climate-change-summit-poland/ <i>Harvard Political Review</i> . “Many Small Islands, One Big Problem.” 2019 https://harvardpolitics.com/world/many-small-islands/
4	September 24	Documentaries Decide on Fall Topics Anote’s Ark Subject to Change https://www.youtube.com/watch?v=VupDgO-4kC8 Others https://www.thecoconet.tv/im:3082/all-videos/
5	October 1	Group Meetings Busby in Europe
6	October 8	Climate Security in Oceania – Water and Agriculture Nurse, L.A., R.F. McLean, J. Agard, L.P. Briguglio, V. Duvat-Magnan, N. Pelesikoti, E. Tompkins, and A. Webb, 2014: Small islands. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Barros, V.R., C.B. Field, D.J. Dokken, M.D. Mastrandrea, K.J. Mach, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1613-1654. McCubbin et al. “Where does climate fit? Vulnerability to climate change in the context of Funafuti, Tuvalu.” <i>Global Environmental Change</i> . 2015. 43-55. CGIAR. “Climate change and Pacific Island food systems” 2016. 1-40. IFPRI. “Climate change, food security, and socioeconomic livelihood in Pacific Islands.” 1-26. USAID. “Overview of Water Security in Pacific Islands.” 2016. 7-17. World Bank. Rapid Review of Water Knowledge for Pacific Small

		Islands Developing States. 2018. 7-23.
7	October 15	<p>Climate Security in Oceania – Managed Retreat/Migration</p> <p>Berchin et al. Climate change and forced migrations: An effort towards recognizing climate refugees. <i>Geoforum</i>. 2017. 147-150.</p> <p>Kothari. Political discourses of climate change and migration: resettlement policies in the Maldives. <i>Geographical Journal</i>. 2010. 130-140.</p> <p>Farbatko, Carol. “The first climate refugees? Contesting global narratives of climate change in Tuvalu.” <i>Global Environmental Change</i>. 2012. 382-390.</p> <p>Arnall, Kothari. Challenging climate change and migration discourse: Different understandings of timescale and temporality in the Maldives. <i>Global Environmental Change</i>. 2015. 199-206.</p> <p>Barnett, Oneill. “Islands, resettlement, and adaptation.” <i>Nature</i>. 2012. 8-10.</p> <p>Barnett, Jonathon. The dilemmas of normalising losses from climate change: Towards hope for Pacific atoll countries. <i>Asia Pacific Viewpoint</i>. 2017. 3-13.</p> <p>Storlazzi et al. Most atolls will be uninhabitable by the mid-21st century because of sea-level rise exacerbating wave-driven flooding. <i>Science</i>. 2018. 1-9.</p> <p>Dannenberget al. Managed retreat as a strategy for climate change adaptation in small communities: public health implications. <i>Climatic Change</i>. 2019. 1-14.</p> <p>Kelman, Ilan et al. Does climate change influence people’s migration decisions in Maldives?. <i>Climatic Change</i>. 2019. 285-299</p> <p><i>National Geographic</i>. “Rising seas give island nation a stark choice: relocate or elevate” 2018. https://www.nationalgeographic.com/environment/2018/11/rising-seas-force-marshall-islands-relocate-elevate-artificial-islands/</p>
8	October 22	<p>Approaches - Hot Spot Mapping</p> <p>Busby et al. “Climate Security Vulnerability in Africa Mapping 3.0”</p>

		<p><i>Political Geography</i>. <u>2014</u> 51-67</p> <p>Busby et al. In harm's way: Climate security vulnerability in Asia. <i>World Development</i>. 2018. 88-118</p> <p>Ashley Moran, Busby and Clionadh Raleigh "Stretched Thin: When Fragile States Face Climate Hazards," <i>War on the Rocks</i>, <u>2018</u>. https://warontherocks.com/2018/11/stretched-thin-when-fragile-states-face-climate-hazards/</p> <p>Busby, Ashley Moran and Clionadh Raleigh – "The Double Burden of Climate Exposure and State Fragility" <i>New Security Beat</i> <u>October 15, 2018</u> https://www.newsecuritybeat.org/2018/10/double-burden-climate-exposure-state-fragility/</p> <p>Ashley Moran, Joshua Busby, Clionadh Raleigh, Todd G. Smith, Roudabeh Kishi, Nisha "The Intersection of Global Climate and Fragility Risks" with Ashley Moran, Clionadh Raleigh, Todd G. Smith, Roudabeh Kishi, Nisha Krishnan, and Charles Wight (2nd author), USAID, <u>2018</u>.</p> <p>Look at a few of these country briefs from South and Southeast Asia. https://www.strausscenter.org/cepsa-content/cepsa-country-briefs.html</p> <p>Look at a few of these Pacific Island country profiles. https://www.pacificclimatechange.net/countries</p>
9	October 29	<p>Approaches – Disaster Risk Reduction Evaluation</p> <p>Betzold. Adapting to climate change in small island developing states. <i>Climatic Change</i>. 2015. 481-489.</p> <p>Bussell, Jennifer. Institutional Capacity for Natural Disasters: Findings from Case Studies. 2013. 1-8.</p> <p>Bussell. Institutional Capacity for Natural Disasters: Methodology for Case Studies. 2013. 1-12.</p> <p>Bussell, Jennifer. Institutional Capacity for Natural Disasters: Case Studies in Africa. CCAPS. 2014. 1-25.</p> <p>Bussell, Diya. Disaster Preparedness in Bangladesh. CEPSA. 2017. 1-</p>

		12. Bussell, Diya. Disaster Preparedness in Pakistan. CEPISA. 2017. 1-11.
10	November 5	Rotating Meetings with Busby on Plan of Attack for Paper
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