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To Whom It May Concern

Inquiry into the implications of climate change for Australia's national security.

The Australian Psychological Society (APS) welcomes the opportunity to make a submission relating to the Australian Government's Inquiry into the implications of climate change for Australia's national security. In our submission we offer comment primarily on those parts of the inquiry that are within our area of expertise as psychologists and social science experts.

There are four issues that we wish to address specifically in this submission. First, we will comment on climate change as implicated in extreme weather events and on the role of humanitarian and military response in addressing the threat of increasing and more intense extreme weather event disasters in our region. *Terms of Reference item: The role of both humanitarian and military response in addressing climate change, and the means by which these responses are implemented.*

Second, we will comment on the importance of understanding climate change as encompassing much more than natural disaster and extreme weather events – seeing it instead as an impending human and biospheric disaster which poses a broad spectrum of human security risks and profound environmental and social challenges. *Terms of Reference item: The threats and long-term risks posed by climate change to national security and international security.*

Third, we will discuss the importance of understanding climate change *risk perceptions* (as distinct from *risk assessments*) and how they inform the public's sense of *psychological* security, a missing part of the picture of national security. *Terms of Reference item: The threats and long-term risks posed by climate change to national security and international security.*

Finally, we will also comment on the psychological impacts of climate change, and explain how people's perceptions, thoughts and feelings about climate change influence their level of engagement with climate change mitigation, adaption, and support for Government policies, with implications for national security. *Terms of Reference item: Any other related matters.*

Term of Reference: The role of both humanitarian and military response in addressing climate change, and the means by which these responses are implemented.

Climate change as implicated in extreme weather event disasters

The APS acknowledges that climate change will likely result in an increased frequency and severity of extreme weather events around the world. There are many countries in our region that have particular vulnerabilities because of a combination of geographic location, rapidly expanding populations living in inadequate houses on unstable land, economic factors, and lack of critical infrastructure or services to protect from or respond to disasters. There is obviously an important role for humanitarian and military assistance in response to these events when they overwhelm the countries' own capacity.

Whilst extreme weather event disasters themselves are most likely to result in internal displacements within the affected country rather than large scale movements of people across borders (MacAdam & Saul, 2010), and therefore are unlikely to pose national security risks in Australia, they do however pose significant regional and global *human* security problems that Australia has a regional responsibility to address. These responsibilities are not just part of being a 'good neighbour', but are integral to international climate change agreements whereby wealthy countries have to take responsibility for their large per capita contributions to climate change by helping those poorer countries that are increasingly vulnerable to climate impacts caused by high emitting countries.

Australia's humanitarian and military response in addressing climate-related extreme weather events needs to focus not just on the post-event recovery of the built environment, systems and structures. It must also consider the crucial contributions of social, behavioural and health scientists, with their focus on prevention and preparedness pre-event, as well as the capacity to address the widespread psychosocial impacts post-disaster.

Disaster psychology uses the Prevention, Preparedness, Response and Recovery (PPRR) model of disaster management for good reason. These interlinked initiatives equip a community to protect itself from a future disaster, reduce the impact of an event on individuals and communities, hasten the recovery, and have a much greater magnitude of influence and effectiveness than initiatives that come after the disaster. From a psychological perspective, these initiatives would include a host of risk reduction and mitigation initiatives, including behavioural risk reduction strategies, improved warning systems and public messaging, community disaster preparedness education programs, psychological and household preparedness, and psychological first aid, as well as thorough evaluation of program effectiveness so that evidence-based best practices are

prioritised.(For more information on specific examples of disaster prevention and preparedness measures that save lives, reduce costs and enhance recovery, refer to the APS Submission on Natural Disaster Funding (2014).

The prevention and preparedness components of the PPRR model are critically important for protecting communities, reducing disaster impacts and reducing the risk of internal displacements. Strategies directed at prevention and preparedness are capable of having a much greater magnitude of influence and cost effectiveness compared to emergency response and recovery, hence reducing the recovery costs of natural disasters in economic and human terms.

Australia's humanitarian efforts also need to properly support psychosocial recovery initiatives to address and foster mental health and wellbeing in disaster-affected communities. After a large scale extreme weather event, people frequently experience enormous suffering and a range of psychological responses. Immediately following the disaster many people show high levels of acute distress. For the majority (70-80%), this resolves naturally after about a month with support (Norris et al., 2002; Southwick et al., 2014). But a significant minority of disaster-affected people (approximately 20-30% - see for example La Greca et al., 2013) are at risk of developing enduring and severe mental health problems which require treatment. Proper psychosocial care to protect and improve people's mental health and psychosocial wellbeing during and after disasters is increasingly regarded as an essential part of disaster recovery (IASC, 2007).

The composite term mental health and psychosocial support is used to describe the support that aims to protect or promote psychosocial wellbeing and prevent or treat mental disorder. This stepped care approach begins with more basic community support, like psychological first aid, and moves progressively, as needed, to interventions for more moderate distress, and finally to more intense and individual support. Health-care services, particularly those that attend to psychological trauma, will always need to be bolstered following wide-scale disasters.

Efforts to build community resilience before a disaster event are also a critically important part of addressing climate change impacts in the neighbouring Asia-Pacific regions to protect human security. There is a large literature speaking to the preventability of psychosocial consequences of hazardous events. Various resilience indicators (i.e., protective factors) are known to provide a buffer against conditions like post-traumatic stress, anxiety, depression, secondary family and social stressors and other known by-products of natural, and other, disasters (e.g., Hobfoll et al., 2007; Ronan & Johnston, 2005). These factors include social support, (both actual and perceived), a sense of perceived control/self-efficacy, an ability to solve problems, an ability to manage arousal/self-soothe, a sense of safety, and a sense of hope or optimism for the future. Australia's humanitarian response to vulnerable countries in our region should also focus on pre-disaster initiatives to build resilience within the country to the impacts of climate change.

Recommendation: Ensuring that Australia's humanitarian efforts in the region are maximally strategic and effective, just as global climate change is really starting to cut in, is a much-needed initiative for human security needs in the region as well as within Australia. The crucial contributions of social, behavioural and health scientists, with their focus on prevention and preparedness pre-event as well as risk communication, as well as the

capacity to address the widespread psychosocial impacts post-disaster, are an essential component of Australia's humanitarian efforts in the region.

ii) Term of reference: the threats and long-term risks posed by climate change to national security and international security.

Climate change as an impending human and biospheric disaster which poses a broad spectrum of human security risks and profound environmental and social challenges.

Climate change is, however, much more than just extreme weather event disasters. The APS notes that there is a problematic tendency in international and local reports, inquiries and policy making to address climate change almost exclusively as projected natural disasters, extreme weather phenomena, and ensuing national security threats, (via increased refugee flows and resource conflicts). This is problematic in terms of properly addressing climate change, and indeed, national security.

Policies and recommendations based on extreme weather events/disasters as a proxy for climate change are likely to be fraught with very real problems (e.g., Reser et al., 2014a). The conventional policy response to natural disasters and national security threats compartmentalises these areas. There are many fora and sources that have appeared over the past decade which are essentially recognising that climate change is a global disaster and emergency in itself, requiring transdisciplinary and global thinking and approaches, with the Australian perspective being frequently cited (e.g., Kolbert 2014; Mann & Kump, 2008; IPCC, 2014; Dogden et al, 2016; Fritze et al., 2008; Hughes & McMichael, 2011; Spratt & Sutton, 2008; The Climate Institute, 2011).

Recommendation: What is needed is a whole-of-government (international, national, and local) reappraisal of what global climate change really means and implies with respect to both security and emergency management thinking, planning, and policy making. Without such global and holistic conceptualisation and planning, countries will inevitably find that they have simply not come to grips with what is required by way of realistic preparedness, prevention, adaptation, or mitigation to a global problem which is likely to go on for millennia.

Risk perceptions of climate change and the relationship between psychological security and national security

The assumption that the phenomenon and risk domain of 'climate change' and its ongoing threats are the same as the risk domain of 'disasters and extreme weather events' means that we miss the insights that come from the risk domain of climate change in its own right. The phenomenon and profound threat of global climate change reflects a very different risk domain, including the dread risk, stigma, and uncertainty associated with hybrid disasters, the projected duration of this planetary condition, and ultimately the existential nature of this particular environmental risk (e.g., Reser & Bradley, 2017). Understanding people's risk perceptions of global climate change is critically important because it effects how the Australian people are understanding the threat of climate change, and the implications for

their health and safety. People's risk perceptions influence their *psychological* security and sense of vulnerability, and in turn their behavioural responses.

With respect to the *Terms of Reference* item "*the threats and long-term risks posed by climate change to national security and international security*", the Government should therefore broaden its inquiry to also consider the Australian public's risk *perceptions* of climate change, because of the impact that this has on individual and societal psychological security, and therefore on people's wellbeing, sense of safety within Australia, and future orientation. This is as much a national security issue as is the perceived safety of our borders or perceptions of threat of regional conflict impacting on our lives. Risk perceptions and experienced psychological security are arguably crucial missing components in any strategic picture of national security considerations, particularly so in the context of the complex and global risk and security implications of climate change.

Social science can help to fill out this picture. There is an extensive social science risk literature of the public's risk perceptions of climate change (e.g., Gifford, 2014; Dryzek et al., 2011). Recent surveys show that the public is very concerned about climate change and what is happening to the natural environment – indeed, it is one of the public's highest concerns (PEW, 2015; Capstick et al., 2015). The Australian public and people around the world are experiencing a pervasive insecurity in relation to the looming reality and implications of climate change. People's principal climate change concerns are not about climate change-related threats to our borders or of escalating conflict in our region. Rather, their concerns are about the environment, threats to species, loss of biodiversity, threats to the planet's life support systems and how we are going to address these (Reser et al., 2012; Capstick et al., 2015; PEW, 2015).

Recommendation: Any investigation of threats and long term risks posed by climate change to national security must therefore include the social science considerations of people's risk perceptions of climate change because this is related to public sentiment, priorities, worries and concerns. And how people are thinking and feeling about climate change has an enormous impact on their support for Government policy on issues like climate change or national security.

This will be further discussed in the following section.

Term of Reference item: Any other related matters.

The psychological impacts of climate change

As psychologists, we are also particularly interested in framing climate change in terms of its psychological health and well-being impacts, and understand these to be critically important in terms of how people are then responding to climate change, and in terms of this particular inquiry, on what government policies they will support.

There are actually many social and behavioural science reports detailing the current and projected psychological impacts of climate change (e.g., Clayton et al., 2017; Dryzek, Norgaard & Schlosberg, 2011; Dunlap & Brulle 2015; ISSC/UNESCO, 2013; National Research Council, 2013, 1992; Swim et al., 2011;). The psychological and well-being impacts include experienced concern, worry, anxiety, and distress; preoccupation and

vigilance; felt helplessness and hopelessness; loss, guilt, anger, frustration, temporal pessimism, uncertainty, and a deep sense of foreboding around the consequences of human activities for Earth's life support systems and species.

In the previous section, we raised the importance of the Government better understanding people's risk perceptions of climate change to understand the public's sense of psychological security. How people perceive climate change influences how they feel about it (listed above), and together, these perceptions and psychological impacts mediate and shape the public's engagement with the ongoing global threat of climate change. This is a critical issue for Australia's national security in relation to climate change.

Recommendation: The Government needs to better understand how people's sense of psychological security (diminished by the ongoing stressor of climate change) impacts on their motivation to engage in climate change preparedness, adaptation, and mitigation at individual, community, and institutional levels. And the extent to which the public is engaged with climate change mitigation and adaptation has serious consequences for our capacity to deal with the global threat of climate change and the security threats it poses to people all over world.

Summary

The contributions of social and behavioural scientists, who have been very seriously addressing the challenges of climate change for the past four decades, are critical for helping us to understand the security threats of climate change. The research on climate change risk perceptions offers extremely valuable insights into the concerns expressed by the Australian public, and publics around the world, about the risks posed by climate change to the environment, biodiversity and the planet's life support systems. These are the national security problems that the public are concerned about with relation to climate change. This inquiry into the implications of climate change for Australia's national security will benefit from taking a broader view of the risk domain of climate change, and from serious consideration of how the psychological impacts of climate change affect people's sense of security.

For further information please contact me on

Yours sincerely,

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About the Australian Psychological Society

The APS is the premier professional association for psychologists in Australia, representing more than 22,000 members. Psychology is a discipline that systematically addresses the many facets of human experience and functioning at individual, family and societal levels. Psychology covers many highly specialised areas, but all psychologists share foundational training in human development and the constructs of healthy functioning.

A number of convergent areas of psychological work and practice have focused on the challenges of global environmental change and global climate change for the past few decades. Environmental psychology, social psychology, health psychology, clinical psychology, disaster psychology, community psychology, and organisational psychology have made key contributions in addressing the human dimensions of climate change.

The APS has a Climate Change and Environmental Threats Reference Group comprised of psychological experts in environmental and social psychology. In addition to a thorough understanding of human behaviour, our members have expertise in adaptation, disaster preparedness, barriers to behaviour change, resilience, the built environment, conservation of wilderness heritage areas, waste and recycling, media representations of environmental threats, risk perception and communication, stress and coping, and ongoing environmental stress, amongst other interests.

The APS also has an Interest Group on Military and Emergency Services and Psychology, and a Disaster Preparedness and Response Reference Group (DPRRG), which has considerable expertise in disaster preparedness, disaster response and recovery. The APS has had an extensive involvement in the bushfire, flood and cyclone responses and recovery since 2009 to the present. We have been involved in training mental health professionals to work with affected populations, established a disaster response network of over 1000 psychologists, participated in several multidisciplinary expert reference groups, and worked with both Federal and State government departments on mental health and psychosocial recovery projects. The APS has also produced numerous articles, guidelines, tip sheets and brochures on psychological preparedness for disasters, including bushfires, cyclones, and floods. See http://www.psychology.org.au/publications/tip_sheets/disasters/.

References

APS (2014) Submission to the Productivity Commission Inquiry in Natural Disaster Funding. Australian Psychological Society.
<https://www.psychology.org.au/Assets/Files/20140-APS-SubmissionProductivity-Commission-Natural-Disaster-Funding-June.pdf>.

Dodgen, D., Donato, D., Dutta, T., Kelly, N., La Greca, A., Morganstein, J., Reser, J.P., Ruzek, J., Schweitzer, S. & Shimamoto, M. (2016) Mental health and well-being. In U.S. National Climate Assessment/U.S. Global Change Research Program (USCGRP) *Climate and Health Assessment: Interagency special report on the impacts of climate change on human health in the United States*. (pp 217-246). Washington, DC: U.S. National Climate Assessment/U.S. Global Change Research Program.

- Capstick, S., Whitmarsh, L., Poortinga, W., Pidgeon, N., Upham, P. (2015). International trends in public perceptions of climate change over the past quarter century. *WIREs Climate Change* 2015, 6:35–61. doi: 10.1002/wcc.321.
- Dryzek, J.S., Norgaard, R.B., Schlosberg, D. (2011). *The Oxford handbook of climate change and society* (pp 161-174). Oxford, UK: Oxford University Press.
- Fritze, J. G., Blashki, G. A., Burke, S., & Wiseman, J. (2008). Hope, despair and transformation: Climate change and the promotion of mental health and wellbeing. *International Journal of Mental Health Systems*, 2(13). <http://ijmhs.com/content/2/1/13>
- Gifford, R. (2014). *Environmental psychology, 5th Ed.* Optimal Environments.
- Hobfoll, S.E., Watson, P.E., Bell, C.C., Bryant, R.A., Brymer, M.J., Friedman, M.J. (2007). Five essential elements of immediate and mid-term mass trauma intervention: Empirical evidence. *Psychiatry*, 70, 283–315.
- Hughes, L. & McMichael, T., (2011). *The Critical Decade: Climate change and health.* Climate Commission, Commonwealth of Australia
- Intergovernmental Panel on Climate Change (IPCC). (2014). *IPCC Fifth Assessment Report*. Geneva, Switzerland: IPCC Secretariat.
- Inter-Agency Standing Committee (IASC) (2007). *IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings*. Geneva: IASC.
<https://www.psychology.org.au/Assets/Files/IASC-Guidelines-Mental-Health-Psychosocial.pdf>
- Kolbert, E. (2014) *The sixth extinction: An unnatural history*. New York, NY: Picador.
- La Greca, A. M., B. S. Lai, M. M. Llabre, W. K. Silverman, E. M. Vernberg, and M. J. Prinstein, 2013: Children's postdisaster trajectories of PTS symptoms: Predicting chronic distress. *Child & Youth Care Forum*, 42, 351-369. doi:10.1007/s10566-013-9206-1 | Detail
- McAdam, J., & Saul, B. (2010). 'Displacement with Dignity: Climate Change, Migration and Security in Bangladesh' (2010) 53 *German Yearbook of International Law* 233
- Mann, M.E. & Kump, L.R. (2008). *Dire predictions: Understanding global warming: The illustrated guide to the findings of the IPCC Intergovernmental Panel on Climate Change*. New York: DK Publishing.
- Norris, F. H., Friedman, M. J., Watson, P. J., Byrne, C. M., Diaz, E., & Kaniasty, K. (2002). 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981–2001. *Psychiatry: Interpersonal and Biological Processes*, **65**, 207-239. doi:10.1521/psyc.65.3.207.20173 | Detail
- PEW Research Centre (2015). Global Attitudes Survey.
<http://www.pewglobal.org/2015/11/05/global-concern-about-climate-change-broad-support-for-limiting-emissions/>

Reser, J.P. & Bradley, G.L. (2017) Fear appeals in climate change communication. In *Oxford Research Encyclopedia of Climate Change Communication* In press. New York, NY: Oxford University Press.

Reser, J.P., Bradley, G.L., & Ellul, M.C. (2014). Encountering climate change: 'seeing' is more than 'believing'. *WIREs Climate Change*, 5, 521–537. doi: 10.1002/wcc.286

Reser, J.P. & Bradley, G.L. (2014b) *Why the significance and influence of direct experience with climate change are very different from experience with extreme weather events: Some cautionary research findings*. The 28th International Congress of Applied Psychology 2014. Paris, France, 8-13 July.

Reser, J.P., Bradley, G.L., Glendon, A.I., Ellul, M.C. & Callaghan, R. (2012) *Public risk perceptions, understandings and responses to climate change and natural disasters in Australia: 2010-2011 national survey findings*. Gold Coast, Qld: National Climate Change Adaptation Research Facility. www.nccarf.edu.au/publications/public-risk-perceptions-second-survey

Ronan, K.R. & Johnston, M.J. (2005). *Promoting Community Resilience in Disasters*. New York: Springer.

Southwick, S. M., G. A. Bonanno, A. S. Masten, C. Panter-Brick, and R. Yehuda, 2014: Resilience definitions, theory, and challenges: Interdisciplinary perspectives. *European Journal of Psychotraumatology*, **5**. doi:10.3402/ejpt.v5.25338 | [Detail](#)

Spratt, D and Sutton, P. (2008). *Climate Code Red: The Case for Emergency Action*. Melbourne: Scribe.

United States Global Change Research Program (USCRP). (2014). *Climate change impacts in the United States: The third national climate assessment*. Washington, D.C.: U.S. Global Change Research Program.