Project and Output	Output type
Climate change, housing, and health: A scoping study on intersections between vulnerability, housing tenure, and adaptation to extreme heat	n responses
A scoping study on intersections between vulnerability, housing tenure, and potential adaptation responses (Issues Paper).	
Outline of findings from case study research and typology of housing related climate risks to human health.	
Climate change, housing and health: a scoping study on intersections between vulnerability, housing tenure and potential adaptation responses.	
Climate change, housing and health: Sustainable adaptation responses to extreme heat.	
Morris NB, Gruss F, Lempert S, English T, Hospers L, Capon A and Jay O (2019) <u>A preliminary study of the effect of dousing and foot</u> <u>immersion on cardiovascular and thermal responses to extreme heat.</u> Journal of the American Medical Association (JAMA); 322(14):1411-141	
Morris NB, English T, Hospers L, Capon A and Jay O (2019) <u>The effects of electric fan use under differing resting heat index conditions:</u> <u>A clinical trial</u> . Annals of Internal Medicine; Nov 5 2019.	
Capon A, Jay O, Ebi K, Lo S (2019) <u>Heat and health: A forthcoming Lancet Series.</u> Lancet; 394(10198):551-552.	
Jay O and Capon A (2018) Using physiological evidence in heat wave public policy. Lancet Planetary Health; 2:e10.	
Spatial inequality and Australian cities in a warming world.	
Presentation of research at OEH's Adapt NSW Annual Conference in November 2018.	

Project and Output	Output type
Presentation of cooling strategy research at First Global Forum for Heat and Health in Hong Kong, December 2018	
Presentation of cooling strategy research at American Meteorological Society Annual Conference in Phoenix, USA, January 2019.	
Extreme heat, social vulnerability and health. Evidence-based public health guidance during hot weather and heat waves, The University of Sydney.	
The Invisible Informality' at the recent Housing Theory Symposium: Informal Housing, held at Women's College at the University of Sydney in February.	
Presentation of research at DPIE Adapt NSW Annual Conference, November 2019.	
Presentation of research at Adapt NSW, Human Health and Social Impacts (HHSI) Node - Research Priorities Workshop, Sydney NSW, May 9, 2019.	
Sydney Neighbourhood Heat Project – Roundtable discussion – University of Sydney, February 12, 2020.	
The University of Sydney "Raising the bar" public speaking event: The Heat is On (Sydney CBD, Oct, 2018).	
The University of Sydney Rural Health "Big Ideas, Small Bars" public event: The Heat is On (Orange NSW, Feb, 2019).	
Presentation at the HHSI Node Showcase March 31st 2020.	
Roundtable discussion: Projecting the impact of convective flow for reducing indoor thermal discomfort, air conditioner use, and electricity consumption during hot weather.	

Project and Output	Output type
Heat inequality creates 'ecological enclaves' while putting Sydney's most vulnerable residents at risk	
Sport scientists are helping Rugby League players cope with the humidity during the (ABC Radio North Queensland)	Č:
Players at the Rugby League World Cup matches in North Queensland are taking longer (ABC Radio North West Western Australia)	
Interview with Dr Ollie Jay, Senior Lecturer in Thermoregulatory Physiology (ABC Radio Melbourne; ABC Radio North West Western Australia)	
Fans for that: how to handle a heatwave (Age, Melbourne)	Č.
A surprising way to stay cool in a heatwave, Sydney Morning Herald; Stock and Land; North Queensland Country Life)	
Be a climate hero – switch on the fan	
Lost the plot': Fans may provide low-cost heat relief that is often ignored (also in The Age; Canberra Times)	
Cooling strategies during heatwaves (ABC Radio Sydney; 2GB Radio; 2SER Radio; 2M Sydney; ABC Central West)	
Feeling the Heat? Here's When Fans Can Help—and When They Don't—According to Science (TIME Magazine)	
Study aims to help prevent heatwave deaths (Published Australia-wide in 151 print news outlets including Courier Mail, Daily Telegraph and Adelaide Advertiser on February 17-18, 2019)	

Project and Output	Output type
Building climate resilience through policy-engaged mental health research: Summary of findings	
Building climate resilience through policy-engaged mental health research: Policy implications and further research priorities	
Matthews V, Longman J, Berry HL, et al. <u>Differential Mental Health Impact Six Months After Extensive River Flooding in Rural</u> <u>Australia: A Cross-Sectional Analysis Through an Equity Lens.</u> Front Public Health. 2019;7:367. Published 2019 Dec 6 (Frontiers in Public Health)	
King J, Longman J, Matthews V, Bennett-Levy J, Bailie R, Carrigg S, Passey M (2020). <u>Disruptions and mental health outcomes</u> following Cyclone Debbie. Australian Journal of Emergency Management. 35:3	
Fitzgerald K, Pit S, Rolfe M, McKenzie J, Matthews V, Longman J, Bailie R. (2020) <u>Cross sectional analysis of depression amongst</u> <u>Australian rural business owners following cyclone-related flooding.</u> BMC Journal of Occupational Medicine and Toxicology. 15: 12.	
Longman, J.M., Bennett-Levy, J., Matthews, V. et al. <u>Rationale and Methods for a Cross-Sectional Study of Mental Health and</u> <u>Wellbeing Following River Flooding in Rural Australia, Using a Community-Academic Partnership Approach</u> BMC Public Health 19, 1255 (2019).	
Established two Community Advisory Groups (in Lismore and Murwillumbah)	
Presented key findings to Community Advisory Groups (CAGs)	
Summary of findings	Infographic
Held public seminar about results at UCRH coinciding with one-year anniversary of the flood	
Feedback sought and obtained by key CAG members describing the value of their participation in this research	

Project and Output	Output type
Director Ross Bailie and Dr Jo Longman presented initial findings and community engagement aspects of the project	
Presentation on warnings, evacuation and evacuation centres at a Disaster Welfare Interagency Meeting, October 2018.	
Presentation about the study and key findings at a Red Cross Emergency Services Regional Forum, November 23, 2018	
Presentation at the HHSI Node Showcase March 31st 2020.	
Report to ACON on LGBTQI mental health outcomes	
Provided targeted briefings to the following community organisations within our study area	Correspond- ence
Established a project web page for project updates and findings	Webpage
Findings sent to survey participants who requested feedback, via email and postage	Correspond- ence
Submission in response to a local council planning application - Mental health outcomes following flooding in the Northern Rivers: important findings from Community Recovery After Flood Survey for consideration of DA18_0486, East Murwillumbah	Submission
Submission to the Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry – Insurance and Mental Health following 2017 flood	Submission
Did Debbie affect you? (Northern Star)	
News in Brief: Flood survey (Northern Star)	

Project and Output	Output type
After the flood community health and well-being (Dunoon and District Gazette)	
After the flood community health and well-being project launch	
Get heard about flood recovery (Echo Net Daily)	
Community recovery after flood project (Echo Net Daily)	
Launch of After the flood community health and well-being survey (Northern Rivers Talk Turkey)	
Flood survey aids recovery (nimbingoodtimes)	
More people needed to fill out flood survey (Echo News)	
R We Ok' suvey here (Echo News)	
Survey checks health after the flood (Echo News)	
Flood survey launched (Northern Star; Tweed Valley Weekly)	
Six months on since (Tweed Valley Weekly)	

Project and Output	Output type
Community recovery after flood (Uki News)	
Flood impact physical mental (Northern Star)	
Hundreds still displaced from homes after flood (Echo Net Daily)	
Something good growing in town (Northern Star)	
How the flood impacted our mental health (Echo News)	Č:
Looking out for one another after the flood (Northern Star)	Č:
Call to look after yourself, friends and family post flood (Tweed Valley Weekly)	Č:
Not one to celebrate, but to learn from (Northern Rivers Echo)	Č:
Initial findings from after the flood survey (Healthspeak - publication of Northern Coast Primary Health Care Network)	
Research of local importance (University of Sydney Magazine)	
Assessing novel surveillance technologies to detect exotic mosquitoes in northern NSW	
Northern Rivers Emerging Vector Response Plan: Rapid Response Exotic Mosquito Surveillance Field Exercise, Tweed Shire Council	

Project and Output	Output type
Northern Rivers Exotic Mosquito Response Plan: Field Exercise Technical Report Tweed Shire Council	
Mozzies and pollution (ABC Radio National)	Č.
Avoiding the buzz kill: mozzies, wetlands and public health.	
Can a smart-phone app repel mosquitoes?	
Insect population decline leaves Australian scientists scratching for solutions	Č
How the new mozzie emoji can create buzz to battle mosquito-borne disease	Č
What can I eat to stop mosquitoes biting me	Č
Tackling mosquitoes togetherpreparing to respond to the threat of exotic mosquitoes in northern NSW	
Surveillance strategy discussed at "Exotic Mosquito Workshop" held on 01/11/2017 at Tweed Shire Council with local stakeholders sharing perspectives on approach	
Environmental Health Response to Mosquitoes of Public Health Concern" included in Environmental Health Protection Branch Environmental Health Workshop, North Sydney, February 2018.	
Planning components of project included in presentation titled "The public as a partner in enhancing mosquito surveillance networks to protect public health" included in program of the Australian Citizen Science Conference, Adelaide, February 2018.	

Project and Output	Output type
Presentation of research at OEH's Adapt NSW Annual Conference in November 2018.	
Presentation at the HHSI Node Showcase March 31st 2020.	
Presentation at the HHSI Node Showcase December 8th 2020.	
Development of conceptual framework for climate change, health and well-being in NSW	
Workshop summary report: Development of a conceptual framework for climate change, health and well-being in NSW	
Boylan S, Beyer K, Schlosberg D, Mortimer A, Hime N, Scalley B, Alders R, Corvalan C, Capon A. <u>A conceptual framework for climate</u> change, health and wellbeing in NSW, Australia, Public Health Res Pract. 2018;28(4):e2841826.	
One-day workshop: Development of a conceptual framework for climate change, health and well-being in NSW	
Presentation at the HHSI Node Showcase March 31st 2020.	
Climate change and allergy in NSW: vulnerability and adaptation	
Ziska LH, et al (Beggs PJ). <u>Temperature-related changes in airborne allergenic pollen abundance and seasonality across the northern</u> hemisphere: a retrospective data analysis. The Lancet Planetary Health 2019;3(3):e124–e131	
Beggs PJ. Climate change and allergy in Australia: an innovative, high-income country, at potential risk. Public Health Research & Practice. December 2018;28(4)	
Is Sydney also vulnerable to epidemic thunderstorm asthma: preliminary results from an investigation of a November 2010 event. Thunderstorm Asthma Prediction Science Workshop, 3 March 2020, Bureau of Meteorology.	

Project and Output	Output type
Presentation at the HHSI Node Showcase March 31st 2020.	
Health and Social indicators of Environmental Exposures	
Health and Social Indicators of Environmental Exposures: Methodology report	
Health and Social Indicators of Environmental Exposures: Data sources report	
Results of selected Environmental Health Indicators in NSW 2018	
Health and Social Indicators of Environmental Exposures Final Report	
Health and Social Indicators of Environmental Exposures: Project Executive Overview	
Health and Social Indicators of Environmental Exposures: Indicators Results In Brief	
User Guide: Environmental Health indicators Data Platform and Workflow Overview with Users' Guide	
Internal procedures manual: The CAR and Environmental indicators Procedures Manual.	
Edokpolo B, et al (Hanigan I). 2019. <u>Developing a Conceptual Framework for Environmental Health Tracking in Victoria</u> , Australia Int. J. Environ. Res. Public Health. Volume 16 Issue 10	
Hanigan et al. <u>The burden of mortality attributable to anthropogenic PM2.5 in Australia, 2010-2016</u> , <i>Environmental Epidemiology:</i> October 2019 - Volume 3 - Issue - p 152	
Meeting with Victorian EPA	

Project and Output	Output type
Adapt NSW meeting 12 Nov 2019.	
Presentation at the HHSI Node Showcase March 31st 2020.	
Health and Social Indicators of Environmental Exposures: Agreed scoping process.	
Health and Social Indicators of Environmental Exposures: Presentation and discussion of final reports with stakeholders	
Health and Social Indicators of Environmental Exposures Meeting to Access air pollution data.	
Health and Social Indicators of Environmental Exposures Meeting to Access mosquito ecology data.	
Health and Social Indicators of Environmental Exposures Meeting to Access walkability and roads data.	
Health and Social Indicators of Environmental Exposures Meeting to Access noise model.	
Health and Social Indicators of Environmental Exposures Meeting: International comparison and planning	
Impacts of climate change on food supply chains in NSW	
Literature review on projected climate change effects i) in NSW, ii) across regional Australia, and iii) on food supply chains in particular.	
Final report - Impacts of climate change on food supply chains in New South Wales, Australia.	

Project and Output	Output type
Malik, A., Lenzen, M., Li, M., Fry, J., Liyanapathirana, N., Beyer, K., Boylan, S., Lee, A., Raubenheimer, D., Geschke, A., Schlosberg, D. 2020. Impacts of climate change on food supply chains in New South Wales, Australia. (To be submitted to Nature Food)	
Presentation of results to stakeholders.	
Meeting to finalise results with stakeholders.	
Presentation at the AdaptNSW 2019 event, Darling Harbour, 12 November 2019.	
Presentation at the HHSI Node Showcase March 31st 2020.	
Environmental footprint assessment of NSW healthcare system	
Final report - Environmental footprint assessment of the NSW Healthcare System	
Arunima Malik, Michael Padget, Sarah Carter, Takako Wakiyama, Isis Maitland-Scott, Aditya Vyas, Sinead Boylan, Georgina Mulcahy, Mengyu Li, Manfred Lenzen, Kate Charlesworth, Arne Geschke, 2020, Environmental Impacts of Australia's largest healthcare system, a manuscript submitted to the journal of Resources, Conservation and Recycling.	
Project workshop to discuss about the aims, objectives and deliverables of the project.	
Presentation at the HHSI Node Showcase March 31st 2020.	
Environmental footprinting of healthcare systems, Presentation at the NHMRC Clinical Trials Centre Health Economics webinar, November 2020.	
Governing the Health Impacts of Climate Change in New South Wales	

Project and Output	Output type
Governing the Health Impacts of Climate Change in New South Wales: An Initial Examination of Legislative Frameworks for Public Health, Emergency Management and Environmental Protection – Final Report	
Workshop report- Governing the Health Impacts of Climate Change in New South Wales: an initial examination of legislative frameworks for public health, emergency management and environmental protection.	
A one-day workshop at The University of Sydney's CBD campus to discuss the draft paper and build a network of stakeholders specialising in the governance of climate change and health in NSW: March 2020.	
Presentation of research at HHSI Node Showcase March 31 st 2020.	
Presentation of research at HHSI Node Showcase December 8 th 2020.	
Developing policies on climate change adaptation, resilience and mitigation for the health system in NSW	
A review of strategies to support environmentally sustainable and climate-resilient health systems.	
Presentation of research at HHSI Node Showcase March 31 st 2020.	
Identifying the impacts of climate change on mental health and wellbeing of vulnerable populations and strengthening inter capacity to enhance rural adaptability and resilience.	ersectoral
Identifying the impacts of climate change on mental health and wellbeing of vulnerable populations and strengthening intersectoral capacity to enhance rural adaptability and resilience: A scoping review.	
Identifying the impacts of climate change on mental health and wellbeing of vulnerable populations and strengthening intersectoral capacity to enhance rural adaptability and resilience: Final report.	

tract based on this work for the 2020 Rural Remote Mental Health Symposium Canberra, October 2020. Exertation of research at HHSI Node Showcase March 31st 2020. Exertation of research at AdaptNSW November 2020. Exertation of research at AdaptNSW November 2020. Exertation of research at Indoor Environmental Quality seminar lab, University of Sydney 22 May 2020. Exertation of research at Urban Climate Research seminar, UNSW.	Project and Output	Output type
sentation of research at HHSI Node Showcase March 31st 2020. sentation of research at AdaptNSW November 2020. sentation of research at AdaptNSW November 2020. sentation of research at AdaptNSW November 2020. sentation of urban greening technologies on urban heat, climate adaptation and health act of urban greening technologies on urban heat, climate adaptation and health. sentation of research at Indoor Environmental Quality seminar lab, University of Sydney 22 May 2020. sentation of research at Urban Climate Research seminar, UNSW.	Stakeholder consultation workshops	
sentation of research at AdaptNSW November 2020.	Abstract based on this work for the 2020 Rural Remote Mental Health Symposium Canberra, October 2020.	
act of urban greening technologies on urban heat, climate adaptation and health act of urban greening technologies on urban heat, climate adaptation and health. Sentation of research at Indoor Environmental Quality seminar lab, University of Sydney 22 May 2020. Sentation of research at Urban Climate Research seminar, UNSW.	Presentation of research at HHSI Node Showcase March 31st 2020.	
act of urban greening technologies on urban heat, climate adaptation and health.	Presentation of research at AdaptNSW November 2020.	
sentation of research at Indoor Environmental Quality seminar lab, University of Sydney 22 May 2020.	Impact of urban greening technologies on urban heat, climate adaptation and health	
sentation of research at Urban Climate Research seminar, UNSW.	Impact of urban greening technologies on urban heat, climate adaptation and health.	
	Presentation of research at Indoor Environmental Quality seminar lab, University of Sydney 22 May 2020.	
entation of research at Research Meeting. Centre for Air pollution, energy, and health Research (CAR), USYD.	Presentation of research at Urban Climate Research seminar, UNSW.	
	Presentation of research at Research Meeting, Centre for Air pollution, energy, and health Research (CAR), USYD.	
Sentation of research at HHSI Node Showcase March 31 st 2020.	Presentation of research at HHSI Node Showcase March 31 st 2020.	
ntifying the health impacts of climate change, adaptation strategies and responses among Aboriginal communities in NSW.	Identifying the health impacts of climate change, adaptation strategies and responses among Aboriginal communities in NS	W.
itifying the health impacts of climate change, adaptation strategies and responses among Aboriginal communities in NSW.	dentifying the health impacts of climate change, adaptation strategies and responses among Aboriginal communities in NSW.	

Project and Output	Output type
Stakeholder consultations to identify the health impacts of climate change, adaptation strategies and responses among Aboriginal communities in NSW	
Stakeholder workshop to identify the health impacts of climate change, adaptation strategies and responses among Aboriginal communities in NSW October 2020.	
Presentation of research at HHSI Node Showcase December 8 th 2020.	
Presentation of research at AdaptNSW November 2020.	
Developing a glossary of terms to support climate change and health research.	
Developing a glossary of terms to support climate change and health research.	
Developing a glossary of terms to support climate change and health research stakeholder workshop.	
Presentation of research at HHSI Node Showcase December 8 th 2020.	
A glossary of terms to support climate change and health research.	Database
Quantifying the health risks due to air pollution fire smoke.	
Report: The pattern of air pollution related health conditions during the 2019-20 bushfire period compared to "control" periods in previous years unaffected by fire smoke.	
Jegasothy, E. Quantifying the Health Risks of Bushfire Smoke During the 2019-2020 Bushfire Season. Presented at the University Centre for Rural Health Seminar Series. The UCRH is a rural-based centre in Lismore NSW.	

Project and Output	Output type
Morgan, G. Why climate change and unsustainable development are health hazards. Sydney Ideas Seminar also distributed as a podcast through the University of Sydney.	
Environmental and Social Indicators for tracking health impacts of climate and health.	
Environmental and Social Indicators for tracking health impacts of climate and health.	
Presentation of research at AdaptNSW webinar November 2020.	
Advancing knowledge translation and exchange for the Human Health and Social Impacts Node	
Advancing knowledge translation and exchange for the Human Health and Social Impacts Node.	
HHSI Node Newsletters (August and November 2020).	Newsletters
Presentation of research at HHSI Node Showcase December 8 th 2020.	
Other HHSI Node Outputs	
Lancet Countdown 2018 Report: Briefing for Australian Policymakers	
Ying Zhang, Paul J Beggs, Alice McGushin, Hilary Bambrick, Stefan Trueck, Ivan C Hanigan, Geoffrey G Morgan, Helen L Berry, Martina K Linnenluecke, Fay H Johnston, Anthony G Capon and Nick Watts. <u>The 2020 Special Report of the MJA-Lancet Countdown on Health</u> and Climate Change lessons learnt from Australia's "Black Summer". Med J Aust. Published online Dec 3 2020.	
Zhang Y, Beggs PJ, Bambrick H, Berry HL, Linnenluecke MK, Trueck S, Alders R, Bi P, Boylan SM, Green D, Guo Y, Hanigan IC, Hanna EG, Malik A, Morgan GG, Stevenson M, Tong S, Watts N, Capon AG. <u>The MJA-Lancet Countdown on health and climate change: Australian</u> policy inaction threatens lives. Med J Aust. 2018 Dec 10;209(11):474. PMID: 30521429	
Arabena K, Armstrong F, Berry H, Brooks P, Capon T , Crabb B, Demaio A, Doherty P, Lewin S, Lo S, Lopez A, McMichael C, McPake B, Moodie R, Nolan T, Ruff T, Sainsbury P, Selvey L, Shearman D, Stanley F, Talley NJ, Watts N. <u>Australian health professionals' statement</u>	

Project and Output	Output type
<u>on climate change and health</u> . Lancet. 2018 Nov 17;392(10160):2169-2170. doi: 10.1016/S0140-6736(18)32610-2. Epub 2018 Oct 24. Erratum in: Lancet. 2018 Nov 17;392(10160):2170. PMID: 30497656.	
Beggs et al. <u>The 2019 report of the MJA–Lancet Countdown on health and climate change: a turbulent year with mixed progress.</u> Med J Aust 2019; 211 (11): 490-491.e21.	
Vardoulakis et al; Morgan G, Hannigan I. <u>Bushfire smoke: urgent need for a national health protection strategy</u> Med J Aust 2020; 212 (8): 349-353.e1.	
Sustainable Healthcare Forum with Dr David Pencheon (OBE, Director, Sustainable Development Unit, NHS, UK), University of Sydney CBD campus, May 2018.	
NHMRC CRE Health and Environmental Change Workshop, University of Sydney, 2018.	
Sustainability Advantage Forum, Sydney, 2018.	
Sustainable Healthcare Forum co-hosted with the Sax Institute, University of Sydney, November 2019.	
The MJA–Lancet Countdown on health and climate change: Australian policy inaction threatens lives: Launch.	
Climate change and mental health indicators workshop.	
Planetary Health: What is it and does it matter? (Raising the Bar, Orange).	
HHSI Node Research Showcase, March 31 st 2020	

Project and Output	Output type
MJA launch: The 2019 report of the MJA–Lancet Countdown on health and climate change: Launch	
AdaptNSW 2020 webinar series.	
MJA launch: The 2020 report of the MJA–Lancet Countdown on health and climate change.	
HHSI Node Research Showcase, December 8 th 2020.	
Climate change is wreaking havoc on Australians' health. What's our plan to fix things? (ABC News)	
Australia lagging behind in tackling health impacts of climate change: report (SMH)	
Climate change a health issue affecting Australians now: report (ABC Radio)	
Heatwaves threaten Australians' health, and our politicians aren't doing enough about it (The Conversation)	
Health system needs to be protected from climate change: doctors (The Age)	
Strengthen health systems to cope with climate change challenges (Sydney University News)	
Health system needs to be protected from climate change: doctors (Brisbane Times)	

Project and Output	Output type
Australia's health system unprepared for climate change, experts warn (The New Daily)	
Health system needs climate-change proofing (Mirage News)	