



ENVIRONMENT INSTITUTE OF AUSTRALIA AND NEW ZEALAND

L2A ONLINE PROFESSIONAL DEVELOPMENT

9, 16 AND 23 SEPTEMBER 2021 | 9AM – 12.30PM

L2A Bushfire Planning

COURSE PROGRAM

Climate change in environmental practice



Environment Institute
of Australia and
New Zealand Inc.



UTS Institute for
Sustainable
Futures

Series Education Partner



Sustainably...
Adapting in context

Student Membership supporter





The Learning to Adapt Bushfire Planning professional development course will deliver targeted skills development on climate change in bushfire planning. Guided by expert speakers from the research and policy communities and by case studies presented by practitioners, we will be considering how to manage bushfire planning under the influence of climate change.

Climate driven changes to Australia's fire regimes have implications for a range of environmental planning and assessment activities, like the management of biodiversity offsets and planning for asset protection. Indigenous land management practices are informing responses to bushfires. Our focus is on the NSW jurisdiction, exploring themes that apply just as well elsewhere.

OVER THREE HALF DAY INTERACTIVE ONLINE SESSIONS WE WILL LOOK AT:

- » Climate change and fire ecology in NRM
- » Planning for bushfire recovery
- » Integrating traditional fire management into NRM

L2A BUSHFIRE PLANNING COURSE DETAILS

SESSION 1 Our understanding of the influence of climate change on bushfire regimes, as one of many interacting pressures on species and ecosystems, is growing. We will explore how NSW policy makers are approaching climate change in the management of the ecological impact of fire and the restoration actions that may be needed.

SESSION 2 Climate change plays a key role in the increasing size, intensity, and destructiveness of bushfires, driving catastrophic impacts on smaller regional centres and threatening urban areas. We will survey some of the policy and practice of building resilience to these events, minimising losses and promoting quicker recovery.

SESSION 3 Fire will continue to be part of all our relationships with Country. We will explore how Indigenous people are leading collaborations with modern science, fostering deeper engagement, contributing to ongoing resilience and maintaining ecological communities of which humans are a part.



COURSE DELIVERY

To facilitate greater access across NSW and Australia, to minimise the risk of disruptions in response to Covid-19 and to maximise your opportunity to interact with peers and with our expert speakers this course will be delivered over 3 x half days, one week apart, live online, via zoom:

- » **SESSION 1:** 9.00am to 12.30pm | Wednesday 9 September 2021
- » **SESSION 2:** 9.00am to 12.30pm | Wednesday 16 September 2021
- » **SESSION 3:** 9.00am to 12.30pm | Wednesday 23 September 2021

Participants will work together in breakout rooms, engage in facilitated discussion with speakers and have access to the course slides at the conclusion to their online professional development.

Participation in the course will be recognised through a Certificate of Attendance, supported by the Institute for Sustainable Futures, UTS and will attract 20 CPD points in the CEnvP program.



UTS Institute for
Sustainable
Futures



WHO SHOULD ATTEND?

This course has been designed for practitioners looking to develop a specialisation or update their skills in natural resource management and looking to develop specialised skills in regulatory, policy, consulting responses to climate change and bushfire planning.

Places are limited. L2A Bushfire Planning will run with a maximum of 30 participants to ensure quality of learning, and adequate scope for networking and engagement. The program will not be recorded to encourage open discussion.



SCAN ME

KEY DETAILS

- » To register visit <https://www.eianz.org/events/event/learning-to-adapt-bushfire-planning> and follow the registration details.
- » Registration will close 5 pm 8 September 2021, or when the course is full.
- » This course will take place subject to minimum registrations being met. Full refunds will be provided in the unlikely event that the course is cancelled and cannot be re-scheduled.
- » Cost is EIANZ Members - \$720, Non-members - \$1050.

Summary program

SESSION 1: CLIMATE CHANGE AND FIRE ECOLOGY IN NRM

9.00AM TO 12.30PM | 9 SEPTEMBER 2021

COURSE INTRODUCTION	Dr Fabian Sack Director Sustainably Pty Ltd
CONSERVATION OF NATURAL AREAS AND CONCEPTS OF DESIGN: BUSHFIRE UNDER THE INFLUENCE OF CLIMATE CHANGE It is acknowledged that climate change is having an impact on shifts in seasonal fire weather and windows for hazard reduction, but little work has occurred in relation to the impact of climate change on fires at the extremes. Conservation efforts rely on the need to predict likely bushfire conditions for planning and construction practice. There is need to shift to retrofitting of existing buildings rather than simple fixed distances, where neighbouring natural areas are sacrificed at the expense of past poor planning decisions.	Dr Grahame Douglas Academic Course Advisor School of Engineering, Design and Built Environment Western Sydney University
FIRE MANAGEMENT IN ENVIRONMENTAL ADAPTATION Polly Mitchell will discuss the current approaches to on-ground environmental adaptation to protect World Heritage sites, including the incorporation of climate change data in fire management strategies.	Polly Mitchell Senior Team Leader - Cultural and Ecosystem Adaptation Climate Change & Sustainability Division NSW Department of Planning, Industry and Environment
BUSHFIRE MANAGEMENT IN A CHANGING CLIMATE Climate change means more bushfires and biodiversity declines. How do we adapt our fire management practices to address an increase in bushfire risk, while minimising environmental impact?	Dr Jeremy Little Director Nature Wise Australia
BUSHFIRE RISK, CLIMATE CHANGE AND PRESCRIBED BURNING Dr Hamish Clarke will talk about the latest research on bushfire risk, climate change and prescribed burning, including contributions to the NSW Bushfire Inquiry in response to the 2019-20 fire season.	Dr Hamish Clarke Research Fellow University of Wollongong

Summary program

SESSION 2: PLANNING FOR BUSHFIRE RECOVERY

9.00AM TO 12.30PM | 16 SEPTEMBER 2021

AUSTRALIAN BUSHFIRES AND THE FUTURE OF URBAN SETTLEMENTS: PATHWAYS FORWARD The impact of the Australian bushfires of 2019/20 was dramatic with many communities still in the process of recovery. Communities are now beginning to consider the possibilities of developing more climate resilient responses. This presentation will explore what those possibilities could be for a more sustainable future.	Professor Barbara Norman Chair and Professor of Urban and Regional Planning Faculty of Arts & Design University of Canberra
LESSONS LEARNT FROM IMPLEMENTING CURRENT BUSHFIRE STATUTORY OBLIGATIONS: CONSIDERATIONS FOR CLIMATE CHANGE POLICY MAKERS The session will draw on Brendan and Julie's decade of experience collaborating with government agencies to deliver on statutory obligations for bushfire. The presentation will highlight successes and challenges from a practical implementation perspective, and suggest some key learnings for application to climate change policy.	Brendan Pratt Director Alphitonia Pty Ltd and Julie Pratt Operations Manager Alphitonia Pty Ltd
NSW GOVERNMENT BUSHFIRE RISK MANAGEMENT RESEARCH HUB – INSIGHTS FROM MONITORING AND ANALYSIS USING SOCIAL NETWORK ANALYSIS (SNA) This session will demonstrate the importance of interdisciplinary teams, knowledge brokers and effective knowledge management when working in domains of complexity; specifically bushfire risk.	Dr Rebecca Cunningham Research Principal University of Technology Sydney Institute for Sustainable Futures and Matthew Adams Bushfire Knowledge Exchange Officer Fire and Cultural Science, Science, Economics and Insights Division NSW Department of Planning, Industry and Environment
BUILDING RESILIENCE: CLIMATE WISE COMMUNITIES Ku-ring-gai Council is the 3rd most vulnerable location to bushfire LGA in NSW with 14,000 homes on the bushland interface. Council developed the Climate Wise Communities program to engage residents in improving their resilience to bushfire and other extreme weather events. The program has been very successful and now incorporates ambient computing technology tools to allow residents to better understand the kind of conditions they need to be prepared for.	Dr Jenny Scott Sustainability Program Leader Ku-ring-gai Council

Summary program

SESSION 3: INTEGRATING TRADITIONAL FIRE MANAGEMENT INTO NRM

9.00AM TO 12.30PM | 23 SEPTEMBER 2021

GRANDMOTHER TREES, ABORIGINAL WOMEN AND FIRE	Jessica Wegener Learning & Certification Coordinator Firesticks Alliance Indigenous Corporation
INTERNATIONAL BEST PRACTICE FIRE MANAGEMENT PRACTICE DEVELOPED IN NORTHERN AUSTRALIA The success of fire management in northern Australia is the result of sustained and arduous on-ground work by a range of landowners and managers. Of greatest significance is the fire management from Indigenous community-based ranger groups, which has led to one of the most significant greenhouse gas emissions reduction practices in Australia.	Rohan Fisher Research Development Charles Darwin University
RESTORING OUR RELATIONSHIPS WITH NATURE (SHARING AN ABORIGINAL APPROACH) From an Aboriginal perspective, we are nature. We are connected through kinship and have inherent responsibilities and obligations to take care of them as they are a part of us. They contribute immensely to our identity purpose and the role we play in creating Country for other species. Knowing this helps us understand our relationship with other species.	Geoff Simpson Senior Scientist NSW Department of Planning, Infrastructure and Environment



ABOUT EIANZ

[The Environment Institute of Australia and New Zealand \(EIANZ\)](#) is the leading not-for-profit professional association for environmental practitioners. The Institute supports the profession and promotes independent and interdisciplinary discussion on environmental policy and practice.

Our members come from all areas of environmental practice and are at the forefront of assessing and addressing complex issues such as climate change, sustainability and preserving biodiversity. Some members are at the start of their careers, while others are highly regarded experts in their field.

PARTNERS



SERIES EDUCATION PARTNER

[The Institute for Sustainable Futures \(ISF\)](#) is a university research institute that has been creating change towards sustainable futures by conducting independent project-based research for Australian and international clients since 1997. ISF's researchers and professional staff come from varied backgrounds, including engineering, architecture, management, economics, science, the social sciences, international studies and political studies.



STUDENT MEMBER SUPPORTER

[Sustainably Pty Ltd](#) specialises in working with organisations responding to emerging climate change risks and opportunities by delivering bespoke training and professional development, research, analysis and advice at scale across different sectors.

KEY CONTACTS

Registration:	Environment of Australia and New Zealand (EIANZ) Phone: 03 8593 4140 Email: office@eianz.org
Course Content:	Fabian Sack, Sustainably Pty Ltd fabian@sustainably.net.au
Sponsorship:	Fiona Gainsford, EIANZ NSW Division fiona@gainsford.com.au

Expert Speakers

SESSION 1: CLIMATE CHANGE AND FIRE ECOLOGY IN NRM

9.00AM TO 12.30PM | 9 SEPTEMBER 2021



Dr Fabian Sack
Director
Sustainably Pty Ltd

Fabian is the founding Director of Sustainably, a consultancy specialising in climate change adaptation capacity building. Prior to this he held senior positions in the water, energy and infrastructure servicing sectors. Fabian has published on ecological economics, skills for sustainability and social impact assessment.

Fabian is a Fellow of the EIANZ and a credentialed Sustainability Expert Professional.



Dr Grahame Douglas
Academic Course Advisor
School of Engineering, Design and Built Environment
Western Sydney University

Dr Grahame Douglas is the academic course advisor of the Postgraduate Construction programs with the School of Engineering, Design and Built Environment, Western Sydney University. He has research interests in bushfire protection measures through planning and construction practice as well as in the impact of climate change on bushfire behaviour. Grahame has worked with the Rural Fire Service of the New South Wales for more than 17 years and was responsible for developing the legislative provisions, policies and guidelines relating to bushfire risk management planning, development control for bushfire prone areas, environmental impact of hazard reduction activities and assisted in initial changes to the state's variations to the Building Code of Australia. He is the principal author of *Planning for Bushfire Protection* (2001 and 2006) and co-authored many journal and conference publications in the relevant area.

Over the past few decades, Dr Douglas has held a number of public positions including the representative in the late New South Wales Bush Fire Council and the Bush Fire Coordinating Committee. He is currently a member of the FP-O2O committee for the Australian Standard AS3959 *Construction in Bushfire Prone Areas*.

Expert Speakers

SESSION 1: CLIMATE CHANGE AND FIRE ECOLOGY IN NRM

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Polly Mitchell

Senior Team Leader - Cultural and Ecosystem Adaptation

Climate Change & Sustainability Division

NSW Department of Planning, Industry and Environment

Polly Mitchell is the Senior Team Leader for Cultural and Ecosystem Adaptation in the NSW Department of Planning Industry and Environment. She has a background in biological conservation and engagement with Indigenous communities, and for the past 12 years has been working on climate change adaptation. Her current work program identifies and implements adaptation actions that can support the continuity of ecosystems, species, tangible and intangible cultural values, landscapes, and practices, from climate change.



Dr Jeremy Little

Director

Nature Wise Australia

Jeremy has 25 years' experience as an ecologist, fire scientist, researcher and land manager in different bioregions of Australia.

He has worked for local government, state government, World Heritage Areas and conservation organisations in strategic planning and management for biodiversity, ecological communities, threatened species, fire and operational management, community engagement and environmental assessment.

He has a doctorate which examined climate change and bushfire risk on the future distribution of wet forests.



Dr Hamish Clarke

Research Fellow

University of Wollongong

I am interested in the drivers of bushfire risk and the impacts of planned and unplanned fire. I combine modelling and observational approaches to prescribed burning, fire weather, fuel, ignitions and climate change. I have worked in bushfire research since before joining the University of Wollongong in 2016, leading work on climate change impacts on bushfire risk for the NSW Government. I am currently part of the NSW Bushfire Risk Management Research Hub.

Expert Speakers

SESSION 2: PLANNING FOR BUSHFIRE RECOVERY

9.00AM TO 12.30PM | 16 SEPTEMBER 2021



Professor Barbara Norman
Chair and Professor of Urban and Regional Planning
Faculty of Arts & Design
University of Canberra

Professor Norman has a combined professional and academic background as a former national president of the Planning Institute of Australia and a current leader in urban and regional research. Recent international research includes Sustainable Pathways for our Cities and Regions: planning within planetary boundaries (Routledge, 2018); Are autonomous cities our urban future? Comment in Nature Communications (Nature Communications, 2018) and Apocalypse Now: Australian Bushfires and the future of Urban Settlements (Nature Urban Sustainability). Professor Norman's next book is Urban Planning for Climate Change (Routledge, 2022).



Brendan Pratt
Director
Alphitonia Pty Ltd

Brendan is the founding Director of Alphitonia, a solutions-based environmental consultancy located on Dharawal land and specialising in Environmental Planning, Ecological Assessments, Project Management and Bushfire Hazard Management. Brendan has 20 years of experience delivering on-ground projects and is an expert in navigating planning legislation, catering for both private and public sector clients. Brendan is passionate about sustainable land management, simplicity and solving real world problems.



Julie Pratt
Operations Manager
Alphitonia Pty Ltd

Julie is the Operations Manager at Alphitonia, a solutions-based environmental consultancy located on Dharawal land and specialising in Environmental Planning, Ecological Assessments, Project Management and Bushfire Hazard Management. Julie has over 18 years of professional experience across the education, health, and environmental sectors and specialises in unpacking legislation, quality assurance and communicating complex ideas simply and effectively. Julie is passionate about people, community building, and social and ecological justice.

Expert Speakers

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Dr Rebecca Cunningham
Research Principal
University of Technology Sydney
Institute for Sustainable Futures

Rebecca Cunningham is a social scientist working in climate change adaptation, and healthy environments. She has expertise in data viz and analysis, natural resource governance, the science/policy/community nexus, science communication (including the use of extended reality and 360 film), and social network analysis (SNA).



Matthew Adams
Bushfire Knowledge Exchange Officer
Fire and Cultural Science, Science, Economics and Insights Division
NSW Department of Planning, Industry and Environment

Matthew manages the Bushfire Risk Management Research Hub for DPIE. A major part of his role is to motivate academics to work alongside policy makers, planners and managers, so findings can be fit for purpose and applied without delay.

He has extensive research experience in landscape management and climate sciences with relevant qualifications in the disciplines of conservation and biodiversity sciences.



Dr Jenny Scott
Sustainability Program Leader
Ku-ring-gai Council

As Sustainability Program Leader for Ku-ring-gai Council Jenny has developed many sustainability tools including guides for investment in natural areas and climate adaptation priorities for extreme weather resilience. Under her guidance, Council imported the US 'Simtable' technology to enhance Council's highly successful Climate Wise Communities program.

Her team wins many awards and shares their work across Australia, Asia and the USA. The United Nations has used their tools to assist poor nations plan climate adaptations.

Expert Speakers

SESSION 3: INTEGRATING TRADITIONAL FIRE MANAGEMENT INTO NRM

9.00AM TO 12.30PM | 23 SEPTEMBER 2021



Jessica Wegener
Learning & Certification Coordinator
Firesticks Alliance Indigenous Corporation

Jessica Wegener is a Ngayampaa Wangaaypuwan Pillarkilu Mayi, she pays her respects to all that have come into her life and shaped her learning pathways and knowledge. Jessica has a diploma in Indigenous land management, small business and project management and has undertaken an undergraduate degree in Environmental Science.



Rohan Fisher
Research Development
Charles Darwin University

Rohan has worked with satellite data and GIS for the last 30 years, initially for CSIRO in Canberra, and subsequently for the Northern Territory government in Alice Springs and Darwin. For the last 18 years, he has worked as a Research Fellow at Charles Darwin University focusing on GIS and Remote Sensing tools Eastern Indonesian and best practice savannah fire management in Northern Australia. His current work is focused on developing Projection Augmented Landscape Models; using low tech tools to create dynamic spatial holograms of country.



Geoff Simpson
Senior Scientist
NSW Department of Planning Infrastructure and Environment

Geoff's role is to link science with cultural practices and provide the wisdom of an Aboriginal approach to caring for Country.



L2A

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