

Introduction

I thank you for the opportunity to make this submission to the NSW Bushfire Inquiry, and for considering changes and improvements for future bushfire management and response. The first paragraph of my PhD thesis (submitted March 2020) is valid here:

As I write this, much of the world has gone into lockdown because of COVID-19; Australia, its people and ecosystems are recovering from extensive and devastating bushfires; and, drought continues in many areas. Now more than ever, organisations and their people need to be flexible and adaptive in order to respond to complex and growing social-ecological challenges...

I have a Masters of Business Administration (MBA), a Post Graduate Diploma in Agricultural Economics and Honours Degree in Rural Science. I am a certified Action Learning Coach. My PhD, 'Making time for tea in the public sector: Natural resource management agencies as learning organisations,' has informed this submission, which I write as a community member. While I was not directly impacted by the bushfires, they came very close, and I am connected that those who were directly impacted. My heart aches for those who lost everything, for the terror they experienced and the traumatic impact on our landscapes, fauna, flora and fragile ecosystems. During this time, I have been living through the drought on a farm in north-west NSW with regular visits to the Southern Highlands.

Recommendation 1: Agencies, work units, teams and networks become 'learning organisations'

As environmental problems increase, human conflicts over resource management grow, budgets tighten and societal expectations grow, natural resource and other agencies need to be flexible and adaptable and to learn continuously. The most effective way natural resource agencies, work units, teams and networks can embed continuous learning is by becoming 'learning organisations'. A 'learning organisation' is one in which knowledge is created, integrated and applied on an ongoing basis, behavioural change results from learning, and this enables the organisation to continually adapt and transform in response to internal and external changes. Members continuously share knowledge, skills, perceptions and ideas, changing behaviours when necessary, and adapting and transforming their approaches in response to changing circumstances. They also collaborate with other stakeholders, sharing knowledge, expertise, data and resources. These stakeholders may include other agencies, the federal government, other state and territory governments, local governments, not-for-profits, and community groups. After-action reviews and other regular systematic learning activities and processes are crucial to organisational learning.

Becoming learning organisations often requires leadership, cultural and structural changes, particularly if these tend to be overly hierarchical and bureaucratic. Leaders need to maintain an appropriate balance between adaptive leadership and administrative leadership. This allows leaders and staff to respond effectively to complex challenges of social-ecological systems while meeting the administrative requirements of upper management. Cultures that support learning and adaptability are characterised by high levels of trust and psychological safety, constructive conflict, welcoming diverse opinions, systems thinking, experimental approaches, learning from failure, prioritising time for reflection and dialogue as well as action, collaborating in groups, high levels of autonomy, positive emotions, affective commitment, workplace stability, and staff with attributes suited to organisational learning.

Recommendation 2: Introduce Strategic Adaptive Management in national parks, state forests and other land tenures for bushfire management.

Adaptive management is often regarded as the preferred continuous improvement system applicable to natural resource management; however, successful cases are rare in practice. There is some interest in pursuing adaptive management as a tool for reducing risks and harm to ecosystems and communities in Australia. For example, I attended weeklong course in Adaptive Management for Conservation in September 2019. Facilitated by the Blue Mountains World Heritage Institute,

participants from around Australia and Asia Pacific were enthusiastic about bringing new ways of thinking and new frameworks back to their organisations and communities.

Scientists and land managers in South Africa's Kruger National Park in the mid-1990's developed a closely aligned and highly effective framework, Strategic Adaptive Management. Strategic Adaptive Management is a structured, cyclical, iterative decision-making process aimed at building knowledge, learning, and improving management through responding to the intended and unintended outcomes of actions. The aim of Strategic Adaptive Management is to maintain natural resources in a healthy state through adapting management approaches in response to social-ecological changes, and at the same time address different and sometimes conflicting stakeholder perceptions, values and objectives. It brings together a wide range of knowledge types through collaboration and social learning with multiple-stakeholders. 'Thresholds of potential concern' (TPCs) are used as triggers for responsive and adaptive action.

Barriers to the implementation of adaptive management tend to be social and institutional. Agencies, work units, teams and networks can address these barriers by becoming learning organisations (see Recommendation 1). Becoming learning organisations and implementing effective adaptive management will help responsible organisations, community groups and other stakeholders prepare and plan for future bushfire threats and risks, and identify appropriate action to adapt to these bushfire risks to communities and ecosystems.

Recommendation 3: Instigate use of traditional knowledge to improve fire management

The threat of bushfires was a key area of focus in the Adaptive Management for Conservation course (referred to in Recommendation 2). We did not know at the time that our new knowledge was prophetic and timely, yet too late. The indigenous course participants emphasised the need to re-instigate 'right-way fire' across many areas of Australia. The costs of managing landscapes and ecosystems without traditional knowledge are now clear to see.

Recommendation 4: Climate action

The drought and heat of late 2019 and early 2020 were unprecedented. There is a clear link between the extent and severity of the bushfires and anthropogenic climate change. The world is in a climate emergency with an urgent need for a rapid transition to renewable energy sources and away from fossil fuels. The NSW Government must support these changes and lobby others to do the same. Life as we know it is at stake.

Recommendation 5: No new coal mines

The fires caused the death of many native animals, including koalas, and their habitats. We need to protect those that remain. This means that the proposed Shenhua Watermark Coal Mine, for example, must not go ahead. It is the location of threatened species, including koalas and vegetation communities, including White Box Woodlands.

Final comments

My PhD research and findings are very pertinent to the challenges of these times, and the increasing uncertainty of the complex adaptive systems of which we are part. I look forward to playing a part in new ways of living and working. Please contact me if I can provide any further information or assistance. I am also available for consulting and project work.

Yours sincerely,

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