



Context and Background

Natural disaster resilience & the relationship with environmental management

The [EIANZ Position Statement “Environmental Practice and Natural Disaster Resilience”](#) and the related [“Suggested Actions for environmental practitioners, Divisions & Chapters and Special Interest Sections”](#) capture material from the EIANZ Virtual Annual Conference 2020 [“Recovering from Disaster”](#) series of seven webinars. The documents also relate to observations and recommendations of the [Australian Royal Commission into National Natural Disaster Arrangements \(2020\) \(Royal Commission\)](#) and are consistent with the United Nations Program for Disaster Risk Reduction.

Internationally, there is demand for ecosystem-based solutions and the consideration of Indigenous knowledge for reducing the risks of natural disasters.

The Position Statement and suggested actions are applicable to the Australian and New Zealand situations.

Natural disasters are caused by bushfires, land and sea movement (land slip, earthquake, and tsunami), rainfall and flood inundation, tidal inundation, storm surge, cyclones, and intense weather events including severe storms and drought, when they impact on human settlements.

Natural assets (terrestrial and aquatic ecosystems including landscapes, seas, oceans, lakes, rivers, wetlands, marshes, lagoons, streams and swamps) are impacted by natural disasters. More significantly, the way that natural assets are used and managed, along with their interface with settlement patterns and infrastructure have a significant impact on the ability of communities to be resilient to natural disasters. This is well documented by the Royal Commission and other recent enquiries.

The use and management of our natural assets is one element in a coordinated approach to supporting our communities, economies and environments to be natural disaster resilient. There are important cross-dependencies with other disciplines including land use planning, architecture and building codes, incorporation of climate change into decision making, design of infrastructure, and planning for and managing emergency responses and related mental health.

There is clear evidence that conditions are getting worse with rising temperatures, more and longer heatwaves, reduced rainfall, but more intense rainfall events, rising sea levels and greater intensity of natural disasters. Our communities are faced with increasing effects from bushfires, storms, earthquakes, tsunamis, cyclones and floods. The history of settlement patterns means that more people and infrastructure are being exposed where they are, along with, in response to development pressures, new development in areas that are now becoming disaster hot spots. Many organisations and disciplines are involved in this complex system of activity to address natural disaster resilience and recovery across all levels of government, industry, non-government bodies and communities.

Coordinated action is urgently required. This requires flexibility for any action in any jurisdiction, and at different levels of planning, operations and research. Environmental practitioners appreciate that natural systems and habitats vary widely in their capacity to recover from gross disturbance. In addition, our profession understands complex systems thinking and approaches, and is well placed to lead key environmental management actions.



This framework updates the Position Statement “[EIANZ's Response to Bushfires, Drought and Floods](#)” issued by the President of EIANZ in March 2020. That statement focused on how environmental practitioners could facilitate recovery from bushfires, drought and flood, with reference to the 5 Rs program of the International Union for Conservation of Nature (IUCN). The statement also identified a longer term need for better processes in relation to developing recovery programs in advance of devastating events.

This updated strategic approach, incorporates the previous considerations and aligns with international best practice in disaster resilience – the [Sendai Framework](#) for Disaster Risk Reduction 2015-2030.

In Australia, the National Disaster Risk Reduction Framework (based on the Sendai Framework) sets the policy within which jurisdictions implement their own arrangements consistent also with the national Disaster Recovery Funding Arrangements. The Royal Commission has made recommendations for improving national disaster management arrangements in Australia.

In New Zealand, the [National Emergency Management Agency](#) (NEMA) provides national leadership to create an emergency management system that reduces the impact of emergencies. NEMA works with central and local government, communities, iwi, and business to make sure responses to and recoveries from emergencies are effective and integrated. The National Disaster Resilience Strategy is intended to provide a common agenda for resilience that individual organisations, agencies, and groups can align with for collective impact.

The EIANZ mission is to *connect and support environmental practitioners to promote a sustainable future*. This mission is supported by the [Code of Ethics and Professional Conduct](#) which has a specific reference to “...*Advocate and undertake environmental practice in accordance with principles of environmental stewardship, resilience and sustainability, ..*”.

The EIANZ and environmental professionals are well placed to be proactive and strategic players that add value in delivering a coordinated approach for natural disaster resilience.

Environmental practitioners and EIANZ [Divisions, Chapters](#) and [Special Interest Sections](#) are guided under three themes and related actions targeted at activities across the full range of policy and implementation arrangements relevant to all jurisdictions. These are adapted the Sendai Framework.

The EIANZ sees the value in:

1. Ensuring that the right data and information is available in a useable format
2. Collaborating with other disciplines, while learning from our past, and
3. Improved understanding and management of natural assets for enhanced disaster resilience

See “[Suggested Actions for environmental practitioners, Divisions and Special Interest Sections](#)” for more detail on the role of Environmental Practitioners in building community and environmental resilience to natural disasters.

See [Key references and resources](#) for a selection of related reference material.