Resilient Landscapes Hub 2021 Annual Report – Attachment A

Project number/ID	Project name/title	Project summary	Project leader	Lead organisation	Approved Funding Research Plan 2021					Start date	Completion date	Status	Outputs
					NESP funding $	Other cash contributions $	Other in-kind contributions $	Total other contributions $	Total budget $				
1.1	Solutions science for resilient landscapes	Environmental research has increased awareness of the threats to Australia's biodiversity and the urgent need to address them, but surprisingly little research has focused on solutions. The Resilient Landscapes Hub will adopt a user-driven, solutions-focused, co-research model aimed at strengthening and restoring resilience in Australia's landscapes. This project will support the development and implementation of the 'solutions science' framework under Research Plan 2021 (RP2021). It will also identify a suite of projects and activities to evaluate and iteratively improve the framework and build capacity among researchers, research users and funders to foster the solutions-science approach.	Professor Michael Douglas	The University of Western Australia	200,000	33,333	166,667	200,000	400,000	1/7/21	31/12/22	Current	Solutions science for resilient landscapes start-up webpage
1.2	Strengthening resilience to threatening processes and extreme events	Most terrestrial and freshwater ecosystems have been impacted by a common set of threatening processes. This project will establish the foundation for the hub's research on building resilience to threatening processes such as priority environmental weeds, invasive animals and diseases, extreme events such as bushfires, floods and droughts, and hydrological alterations such as water extraction. The project will also consider landscape-scale interactions among threatening processes. This project will identify prospective research projects based on targeted scoping reviews, workshops with research users and other consultation. Outputs include reviews and a set of priority, co-designed project proposals for submission in subsequent research plans.	Associate Professor Samantha Setterfield	The University of Western Australia	200,000	33,333	166,667	200,000	400,000	1/7/21	31/12/22	Current	Strengthening resilience to threatening processes and extreme events start-up webpage
1.3	Restoring and recovering landscape resilience	Innovative, practical and cost-effective approaches are required to restore and recover resilience for landscapes and species. This project will establish the foundation for the hub's research on practical solutions for landscape restoration and species recovery for terrestrial and freshwater species and ecosystems. This will include identifying opportunities where landscape restoration and recovery can support economic recovery and community prosperity, particularly in regional Australia. This project will identify prospective research projects based on workshops with research users and consultation, and will support co-design with researchers and research users. Outputs include a set of priority co-designed project proposals for subsequent research plans.	Professor Mark Kennard	Griffith University	150,000	25,000	125,000	150,000	300,000	1/7/21	31/12/22	Current	Restoration and recovery for resilient landscapes start-up webpage
1.4	Socioeconomic insights for resilient landscapes	Many challenges for resilient landscapes are attributable to people – but people are an essential part of the solutions. Good data and information are necessary but not sufficient to enhance and restore resilience. Outcomes also depend on social and economic values, norms and behaviours. This project will establish the foundation for the hub's research on (1) evaluating, (2) planning and (3) implementing environmental management strategies/policies/plans and actions for resilient landscapes. It will identify prospective research projects and support co-design with researchers and research users. Outputs include reviews and a set of priority co-designed project proposals for submission in subsequent research plans.	Professor Natalie Stoeckl	University of Tasmania	200,000	33,333	166,667	200,000	400,000	1/7/21	31/12/22	Current	Socioeconomic insights for resilient landscapes start-up webpage
1.5	Monitoring resilient landscapes	Monitoring of environmental condition and trend provides a critical underpinning to policy and operational decision-making. Monitoring has historically required high input by trained personnel, making it costly and therefore highly targeted. Emerging technologies are increasing opportunities for remote or passive monitoring and recruiting non-specialist input including citizen science. This project will identify prospective research projects based on targeted scoping reviews and workshops with research users and other consultation, and will support the co-design process with researchers and research users. Outputs include reviews and a set of priority co-designed project proposals for submission in subsequent research plans.	Dr Chris Chilcott	CSIRO	150,000	25,000	125,000	150,000	300,000	1/7/21	31/12/22	Current	Monitoring resilient landscapes start-up webpage
1.6	Indigenous knowledge and managing the Indigenous estate	This project will bringing together Indigenous knowledge, values and expertise with western scientific knowledge for better planning, prioritisation and evaluation of research actions to enhance the stewardship of the Indigenous estate and adjoining lands. The project will fulfil two broad objectives: (1) establish the foundation for research that delivers solutions for managing the Indigenous estate and (2) mobilise Indigenous knowledge to better understand, manage and conserve Australia's environment. Through participatory research practice – primarily with Indigenous Australians – this project will identify a suite of prospective projects to be co-designed for co-implementation by Indigenous and non-Indigenous researchers in subsequent research plans.	Professor Stephen van Leeuwen	Curtin University	200,000	33,333	166,667	200,000	400,000	1/7/21	31/12/22	Current	Indigenous knowledge and managing the Indigenous estate start-up webpage

1.7	Cross-cutting initiative lead – Threatened and migratory species and threatened ecological communities	This project will provide the research foundation for the 'threatened and migratory species and threatened ecological communities' cross-cutting theme to support policy development, program management and regulatory processes to protect Australia's environmental assets in terrestrial, Ramsar and marine environments. It will also facilitate the Resilient Landscapes Hub's contribution to the cross-cutting themes of the other 3 hubs. It will identify prospective research projects through scoping, reviews and workshops and will support the co-design process with research users and researchers. Outputs include a review and priority co-designed project proposals for submission in subsequent research plans of all four hubs and an overall research plan for this cross-cutting theme.	Professor Helene Marsh	James Cook University	300,000	50,000	250,000	300,000	**600,000**	1/7/21	31/12/22	Current	Cross-cutting initiative research start-up webpage
1.8	Queensland threatened lizard survey	Threatened species of lizards are among native fauna and flora receiving immediate emerging priority funding support from the National Environmental Science Program (NESP). Bushfires, invasive species and loss of habitat have contributed to a decline in some species of snakes and lizards. This project will provide funding to Monash University to support conservation efforts to help reptiles struggling to adapt to changing environmental conditions. This project secured funding as an emerging priorities project under the first phase of NESP. It will now be undertaken by the Resilient Landscapes Hub. The project will conduct fieldwork that surveys sites with historic records, and new potential sites and surrounding habitats. The project will estimate population distribution and abundance; and assess key threats, for a select group of Qld threatened reptile species. The research builds on the findings of a comprehensive review of the conservation status of Australian lizards and snakes carried out in 2017 – Lizard and snake action plan 2019.	Dr David Chapple	Monash University	83,000	-	-	-	**83,000**	1/7/21	30/6/23	Current	Queensland threatened lizard survey start-up webpage