Media Release

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AUSTRALIAN CRAYFISH PROJECT
"Conservation & Research"

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Save the Spinys Project

Helping to save the spiny crayfish following the megabushfire impacts

The Australian Government, through its Wildlife and Habitat Bushfire Recovery Program, has funded a project 'Saving the Spinys' - focusing on the recovery of all 22 priority spiny crayfish species from the Euastacus genus deemed to be at most risk due to the bushfires.

Spiny crayfish from the *Euastacus* genus are an inconspicuous casualty of the widespread and enduring bushfires that profoundly impacted Australia over 2019–20. As with other freshwater animals, spiny crayfish were not only directly impacted as the bushfires swept over the landscape but also following subsequent rainfall and runoff that has delivered ash and sediment into waterways from burnt areas. These impacts may continue to impact these species for months and even years and threaten ongoing survival. 22 Euastacus crayfish were considered seriously impacted by bushfire and it's these 22 species that are the focus of this project.

It's a collaborative project which will inform the conservation of all 22 priority *Euastacus* species impacted by the bushfires. Key objectives are to:

- Determine the extent of range limits, identify critical remnant populations and threats to those populations
- 2. Resolve taxonomic status of the undescribed priority species and identify evolutionarily significant units within species, develop genomic markers and eDNA to support range mapping
- 3. Explore feasibility of conservation translocations (including ex situ production)
- 4. Undertake a Species Expert Assessment Plan to inform EPBC assessment and guide recovery actions

The project will comprehensively, efficiently and consistently determine the best way forward to conserve each species. This is a collaborative project involving:

- Rob McCormack – Research and Aquaculture Director Australian Aquatic Biological and team leader of the privately funded Australian Crayfish Project, which aims to increase knowledge of freshwater crayfish
- Dr Nick Whiterod – Two decades experience researching and conserving aquatic species, with expertise and IUCN training in conservation translocation
- Dr Shane Ahyong – A world expert in the taxonomy and systematics of marine and freshwater crustaceans, with extensive field experience
- Professor Chris Austin – An acknowledged world expert with over 40 years experience on freshwater crayfish genomics, evolution, conservation and taxonomy
- Dr James Furse – 22 years experience studying Euastacus. Assessed Genus Euastacus for the IUCN Red List. International profile in ecology, biology and conservation of freshwater crayfish
- Professor Frederic Grandjean – World authority on freshwater crayfish genomics, evolution, conservation and taxonomy
- Associate Professor Mark Lintermans –35+ years experience in conservation and management of threatened freshwater species and expertise with IUCN/EPBC assessment and recovery planning
- Dr Jonathan Marshall – Experienced ecologist with broad knowledge of macroinvertebrates and freshwater ecosystems

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- Dr Adam Miller – An expert ecological geneticist specialising in conservation genomics, including genomics of Euastacus species, and eDNA biodiversity surveys
- Dr Tarmo Raadik – Over 30 years experience in aquatic freshwater fauna taxonomy, genetics, survey, and conservation management of threatened fauna in SE Australia, with a focus on crayfish species, fish and freshwater mussels
- Dr Sylvia Zukowski – Over 20 years experience in ecological and social research, with a focus on Euastacus species

Project Leader Dr Nick Whiterod from Aquasave-Nature Glenelg Trust said "*the project represents the most significant investment in the conservation of the these spiny crayfish species, and is critically required*".

Rob McCormack added "*this is a major project the likes of which we haven't seen before, make no mistake, the results of this project will rock the scientific community. As Chief Field Researcher I will be in the field for most of 2020/2021 doing what I love to do researching freshwater crayfish*".

Figure 1 Chief Field Researcher Rob McCormack with a rare and endangered adult spiny crayfish

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