Transcript: new freshwater shrimp discovery could be obstacle to NT fracking plans *ABC —AM* February 17, 2021.

[Sabra Lane]: The discovery of a rare freshwater shrimp that lives in complete darkness in waters deep underground may disrupt plans to establish a major shale gas industry in Northern Territories' Beetaloo Basin.

The creatures indicate the basin's underwater lake stretches further than first thought, and reinforces fears held by community groups, including farmers, that any fracking mishap could cause widespread damage. Jane Bardon reports.

Jane Bardon: It's two centimeters long, blind and colorless, but researchers say the shrimp *Parisia unguis* is the apex predator in a thriving ecosystem of aquifer creatures called stygofauna. Dr Gavin Rees is a freshwater ecology research scientist with the CSIRO.

Dr Gavin Rees: This particular species has only been found, so far, in the Northern Territory.

Jane Bardon: The genetically-distinct species has been found throughout the Cambrian limestone aquifer, which stretches under 500 kilometers of horticulture and cattle-grazing country. Dr Rees's report says the fact it's been found across the aquifer shows large parts are connected, and so if there's a spill from gas-fracking operations, the damage to water systems could be widespread.

Resources projects in other parts of Australia—including a planned uranium mine in WA—have been delayed over concerns they could harm similar ecosystems of aquifer creatures. The gas industry body APPEA says the NT's code of practice for gas well construction outline strict controls to protect ground and surface water, including requiring multiple layers of steel and cement to separate wells from aquifers and prevent contamination.