

Media Release

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Havens for crustaceans

NSW Government scientists are taking a deep dive into freshwater spiny crayfish across the Illawarra and Greater Sydney, conducting the first ever study on the importance of environmental flows from Sydney's dams on the wellbeing of these claw-some creatures.

Crayfish are key members of our waterways as major processors of organic matter by shredding, eating, collecting and grazing. They're also an important source of food for invertebrates, frogs, fish and platypus which makes them great indicators of overall catchment health and water management.

They are slow-growing and can take many years to reach full size, sometimes over 1 kg and around 30 cm long. What's even more incredible is they're often the largest, most charismatic animals in the creeks and rivers around Sydney's dams, frequently getting feisty and fighting with one another over resources.

This project - which has begun its early investigation phase - will put the spotlight on the abundance, sex ratio and size structure of freshwater spiny crayfish below the Nepean, Avon, Cordeaux, Cataract, and Woronora Dams.

The work will provide valuable insights into whether environmental water releases, that are built into the relevant water sharing plan, are working effectively and if adjustments to flows are needed in the future to achieve better outcomes for these critters and their aquatic homes.

Working closely with WaterNSW, as the state's dam operating agency, ecohydrologists from the Department of Climate Change, Energy, the Environment and Water will use simple traps to safely catch, weigh, measure and then release the crayfish back into the water.

The results will be available in 2026 after all surveys are completed.

To learn more about DCCEEW's Water Science work, visit: <https://water.dpie.nsw.gov.au/our-work/science-data-and-modelling/surface-water>

DCCEEW Executive Director Water Knowledge Mitchell Isaacs said:

“With their huge claws, beady eyes and vibrant colours, crayfish are not just fascinating creatures that our scientists get up close and personal with, but they're also excellent barometers of river health, providing useful clues as to how the ecosystem is doing.

“Here in NSW, there are many different varieties of crays that live in our rivers including some types like the Fitzroy Falls spiny crayfish that are critically endangered which is why we need to ensure our water management settings are as strong as possible to help them thrive.

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“We already know a fair bit about these crawling crustaceans but what we don’t know is their level of dependence on river flows which is why this investigation is so exciting and we’re proud to be leading this work.

“While it’s only very early days, we’re hopeful it will shed light on where they’re spread and how that links to catchment health. We can’t wait to see the results.”

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