



MEET KELEISHA

Honours student James Cook University

Bachelor of Environmental Practice (Honours)

What is the focus of your current research, and what inspired you to pursue this area of study?

My project involves measuring farm dam shrink/swell dynamics in a drought prone zone with different satellites. Small waterbodies have high levels of biodiversity and are highly ecologically important within drought-stricken areas. Understanding how they behave in a changing climate sparked my interest in this topic.

How do you see your work contributing to the future of the resources sector?

This work contributes to the resources sector through mapping annual water patterns and distribution with different satellites. By examining how waterbodies behave around different river types and landscapes, we can increase the accuracy of our measurements and water storage evaluation. However, the natural environment does not come without its challenges. These high ecological and biodiverse areas are amazing habitats with lush vegetation and complex shapes – making them difficult to map with high accuracy.

What excites you most about working in STEM and being part of the research community at JCU?

The most exciting thing for me is learning about the interesting projects people are working on! I am aiming to become a geomorphologist, who understands how landscapes change over time. JCU has a diverse range of researchers from all areas of the environment. So, when I get to learn something new about rocks, soil, vegetation and processes that link these, it helps me understand a little bit more about why things are the way they are.

What's a challenge that shaped your journey?

The biggest challenge for me is getting out of my own way. The only person stopping yourself from doing what you really want to do is yourself! Showing up for yourself is the best thing you can do in STEM. It takes patience and courage to ask difficult questions that no one knows the answer to yet.

What does 'Shape Our Future' mean to you?

To me, shape our future means we are in this together for the long run! We need to work together to solve difficult problems from different perspectives. A geologist can't tell you why the sky is blue, but I'm sure an astrophysicist can.

An astrophysicist can't tell you how the earth was formed but I'm sure a geologist can. You can't answer the world's problems by yourself, we must work together to shape our future the way we want to.

Your message to future students

If you are considering this pathway, go for it! You never know what you missed out on if you never tried.



Explore what's possible: shapeourfuture.com.au