

CSIRO (the Commonwealth Scientific and Industrial Research Organisation) is facing [another round of job losses](#)

to basic public research, with the news that the organisation is making deep staffing cuts to areas such as

[Oceans and Atmosphere](#)

and

[Land and Water](#)

. Internally, there are signals that Oceans and Atmosphere will be [cut substantially](#)

, amid 350 job losses over two years across the organisation.

In a letter to staff, CSIRO chief executive Larry Marshall said:

CSIRO pioneered climate research ... But we cannot rest on our laurels as that is the path to mediocrity. Our climate models are among the best in the world and our measurements honed those models to prove global climate change. That question has been answered, and the new question is what do we do about it, and how can we find solutions for the climate we will be living with?

This letter reveals a lack of insight about what climate models are for and how they can be used. Their job was not to “prove” that the climate was likely to change and that we had to respond. Their main role is to understand how the climate system works and then to use that knowledge to manage risk, make decisions and improve productivity.

Of course the question of whether humans are changing the climate has been unequivocally answered in the affirmative. But that doesn't mean there aren't plenty more questions to answer. After the federal government was so widely criticised under Tony Abbott for frequently [calling climate science into question](#)

, it is ironic now to make those same climatologists redundant on the basis that their work is done and dusted.

Expect the unexpected

One thing we know about climate change is that the unexpected will occur and while we try to minimise that through better science, at times we will be surprised.

So how do we make sure we do better next time? Recent examples of useful outputs from the CSIRO climate research program include:

The floods of 2011 were more severe than we expected they might be, following on the heels of a record-breaking drought. Both events contained a climate change signal. [Groundbreaking research](#) from Wenju Cai and his colleagues at CSIRO have given us a much better idea of how the Pacific and Indian Oceans combine under climate change to intensify extreme events.

Fire danger in southeastern Australia is higher than [projected a decade ago](#) for [2030 to 2050](#) . Now we need to understand why the fire danger is higher than expected and where it might lead, especially if climate will change the way vegetation responds to fire.

CSIRO research has highlighted the role of the [Southern Ocean as a carbon sink](#) , and in combining with other oceans to influence our weather, not least its substantial role in producing the rainfall that sustains [production in the wheat belt](#) .

CSIRO recently provided a [comprehensive set of projections](#) of Australia's future climate based on the latest climate modelling and related science, tailored for a broad range of uses.

CSIRO has long been a global leader in projecting climate at the regional scale and presenting the information in a form that suits decision makers, and thus Australia has been very well served in this vital input into national adaptation and mitigation planning.

There is little doubt that the funds invested in climate research to date, not to mention land and water research, have been returned many times over in higher production, avoided costs and healthier people and environments.

CSIRO cuts to climate science are against the public good

Written by The Conversation

Australian climate research has a global reputation for punching above its weight. To think that it can be cut and to expect that Australia would be better off for it, shows a radical misunderstanding of what public good research is, and what it can do.

Roger Jones was employed by CSIRO as a climate researcher between 1996 and 2009.

Read more <http://theconversation.com/csiro-cuts-to-climate-science-are-against-the-public-good-54175>