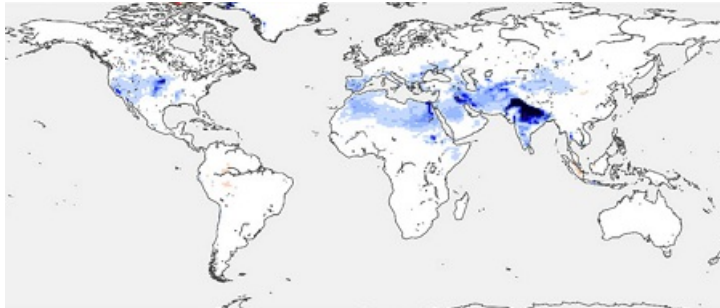


Irrigation reduces extreme heat

Large-scale irrigation can significantly cool the environment, a new international study has found. The research, led by the Swiss university ETH Zurich, showed in a January report published in *Nature Communications* what should be obvious to anyone who has sprayed some water from a garden hose on a hot day. But the effect, combined with the cooling from increased vegetation, is more pronounced on a grand scale. “Observational and model results consistently highlight a strong irrigation-induced cooling effect during warm extremes in intensely irrigated regions”, states the report titled “Warming of hot extremes alleviated by expanding irrigation”. But whilst it otherwise supports the climate-change alarmist axiom that anthropogenic greenhouse gas emissions dominate the combined “forcings” contributing to global warming, the report states that “In some regions, irrigation expansion cancels or even reverses the effects of all other forcings combined.”



The simulated cooling effect of expanding irrigation is most notable in northern India. Source: Nature Communications

The implications for Australia are profound. Dr Annette Hirsch from the ANU Research School of Earth Sciences, one of the report’s nine co-authors, alluded to this in comments on the report posted on the ANU website. Dr Hirsch said that while the research team’s findings showed major benefits from irrigation in places like South Asia, Australia had yet to see similar gains. “Irrigation activity is not as intensive in Australia as South Asia, so we haven’t seen as strong an influence on heat extremes here”, she said. “But we also know that irrigation in Australia has contracted during periods of drought in recent decades.”

But the contraction of irrigation in Australia cannot be blamed solely on the drought. The disastrous MurrayDarling Basin Plan has severely reduced water to irrigators and farmers since 2012, to the tune of more than 2,000 gigalitres (GL) per year. That’s enough water to fill four Sydney Harbours! The crucial question is, what impact has this reduction in irrigation had on temperatures, which have (supposedly) reached new records in the same period?

“Clearly, irrigation has substantially reduced human exposure to the dangerous effects of warming and heat extremes”, says Dr Hirsch. “Our results show heat extremes are partly or completely offset by the cooling effects of irrigation. In this case, irrigation has the same effect for a hotter planet as pumping up the evaporative cooler in your house.”

Dr Hirsch notes the intense irrigation of South Asia, which the report states has reduced the likelihood of “hot extremes” by a factor of eight in some locales. “This is one of the most populous places on the planet, and [that] means that around one billion people benefit from the heat-reversing effects of irrigation”, she said.

Build grand water diversion projects

As the *Australian Alert Service* [has long advocated](#), building the Clarence River Scheme, Bradfield Scheme, Reid Scheme and other grand infrastructure will have enormous economic *and environmental* benefits. The banking establishment has not only done everything to prevent such infrastructure, but has actively supported the radical environmentalist lobby to shut down existing irrigation that was made possible by our celebrated Snowy Mountains Scheme. This process became obvious when investment banker and former Goldman Sachs boss Malcolm Turnbull became water minister and oversaw the passage of the *Water Act 2007* that paved the way for the Basin Plan.

Water traders make obscene profits as they destroy agriculture at the direction of the financial oligarchy.¹ The bankers profit from shortages, but for water, such shortages are largely self-imposed and will easily be solved by building grand water infrastructure, funded through a national government-run development bank with a commitment to long-term nation building.

The Clarence River Scheme would add around 1,000 GL/year of water to the Murry-Darling Basin, generate hydroelectricity and mitigate flooding in the Grafton region downstream. The cooling effect in inland New South Wales from the additional irrigation would be measurable, and would breathe new life into many struggling towns.

Likewise, the Bradfield and Reid Schemes in Queensland would divert and store massive tropical rainfalls for use year-round in irrigation projects across the region. The Bradfield Scheme diverts water from the Tully, Herbert and Burdekin rivers over the Great Dividing Range into North and Central Queensland. Designed by Australia's greatest engineer Dr John Bradfield, who built the Sydney Harbour Bridge among many other grand projects, the scheme has captured the imagination of visionary Australians for decades. The Reid Scheme would utilise a canal to collect some of the floodwaters that would otherwise flush out to the Gulf of Carpentaria. Some of the waters from both the Bradfield and Reid Schemes would eventually flow to Lake Eyre and potentially ensure it remains full. As Dr Bradfield advocated decades ago, such grand water projects will help lower the temperature and improve the climate in Central Australia.

1. "[Water-trading bankers destroy agriculture](#)", AAS, 27 Nov. 2019.

By Jeremy Beck, Australian Alert Service, 12 February 2020