

INDIAN OCEAN CLIMATE INITIATIVE STAGE 3
MILESTONE REPORT 4 (to June 2012)
FOREWORD

I am proud to present the final Indian Ocean Climate Initiative Stage 3 (IOCI3) milestone reports which summarise the findings of a very productive research program.

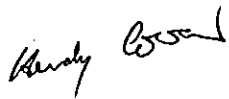
Since 1997, the Indian Ocean Climate Initiative (IOCI) has been delivering quality climate change science and influencing policy and decision making in Western Australia. IOCI's early findings around the drying of south-west Western Australia have informed government decision to construct two desalination plants to help secure Western Australia's future water supply. More recently, Stage 3 research has shown further intensification and expansion of the drying climate of south-west Western Australia. This information has influenced the government's decision in August 2011, to expand the Southern Seawater Desalination Plant near Binningup in the Shire of Harvey. The expanded plant will provide at least half of the water needs of the Perth metropolitan area, securing our water supplies even in the driest of seasons.

IOCI3 also produced high-resolution downscaled projections for south-west and north-west Western Australia. The projections are for average temperature and rainfall as well as extreme temperature and rainfall. More detailed information on likely climate change impacts has assisted in determining how sectors and regions of the State might be impacted by climate change. Better information regarding future changes allows government, industry and the community to work together to develop strategies to avoid or reduce any negative impacts and take advantage of any benefits in the future.

North-west Western Australia has been a focus of IOCI3 and the research findings give us a glimpse into the future climate that our resource-rich north-west region will be facing. We now have a better understanding of the link between rainfall in the north-west and aerosols originating from South East Asia. IOCI3 has also revealed that the number of tropical cyclones impacting on north-west Western Australia is likely to decrease. It has also revealed that the intensity, hence the destructive potential, of these tropical cyclones is likely to increase in the future. All these impacts will need to continue to be considered as we invest more in the north-west region and its communities. Planning now will enable us to better manage the risks that climate change will present to the economic and energy security of the region and the State, as well as to the wellbeing of our communities.

These are only a few examples of the findings of IOCI3. This milestone report and a synthesis report to be released in November 2012 will provide more information that I am sure will be of use to a wide range of sectors in Western Australia.

I have been involved with IOCI since its inception. The many practical applications of IOCI's findings indicate that there is great value to be gained from investment in local fit-for-purpose climate science. For that reason, I regret that the highly successful IOCI program will not be continuing. However, I look forward with optimism to outputs of the IOCI legacy continuing to benefit all of Western Australia for many years to come.



Hon Hendy Cowan

Chair, Indian Ocean Climate Initiative Stage 3 Project Board

Date: 12 August 2012