

# WaterGuide: A new framework for managing water scarcity

15 January 2019 | Manila

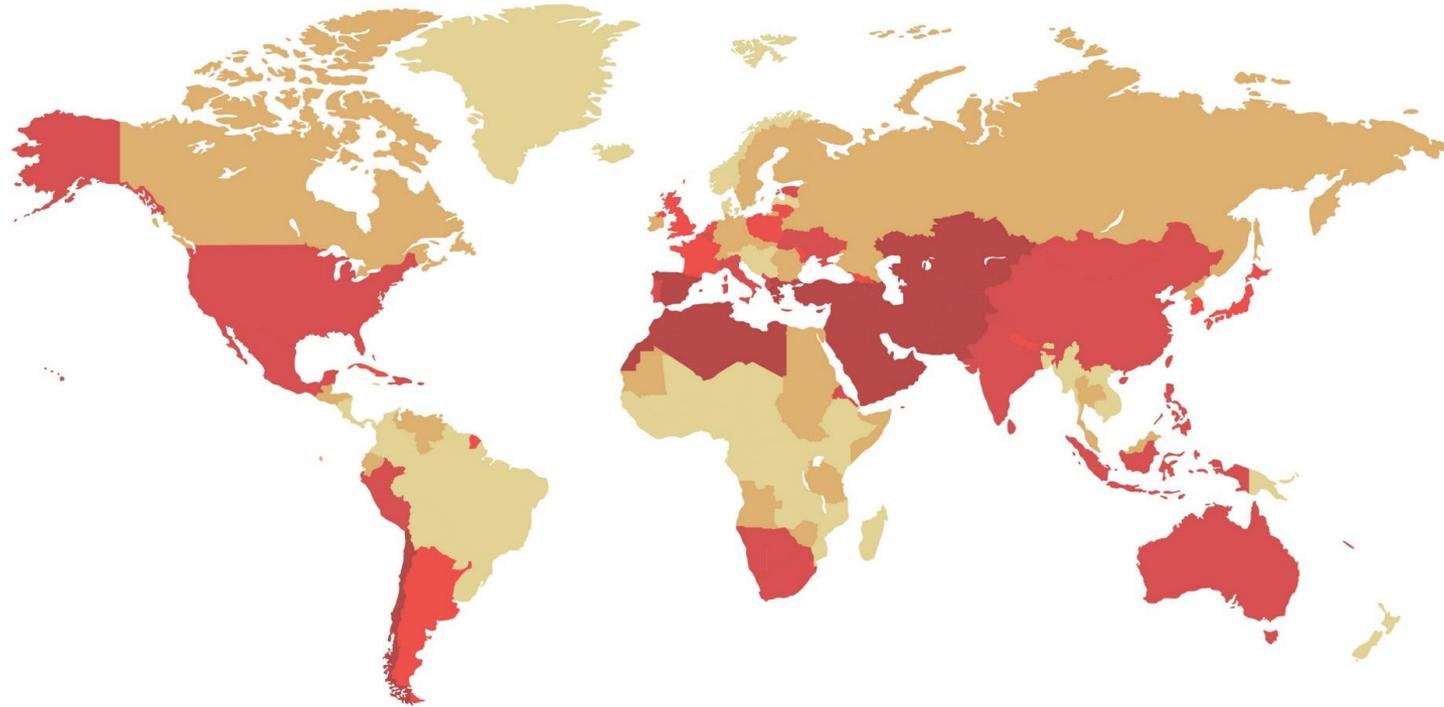
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# WaterGuide



- What is it
  - A conceptual framework for improved water policy and strategy in response to water scarcity
  - Contribution by Australia to the High Level Panel on Water
- Who is it for
  - To lead water managers and decision makers through a guided process of policy support, driven by local priorities
  - To help diagnose problems and identify and guide the implementation of solutions
- WaterGuide is not a prescription. It is a starting point for structured dialogue and partnership to address water scarcity

# Water scarcity



## GLOBAL WATER SCARCITY

Water stress, ratio withdrawals to supply 2040 forecast %



Source: Aither, based on OECD and World Resources Institute

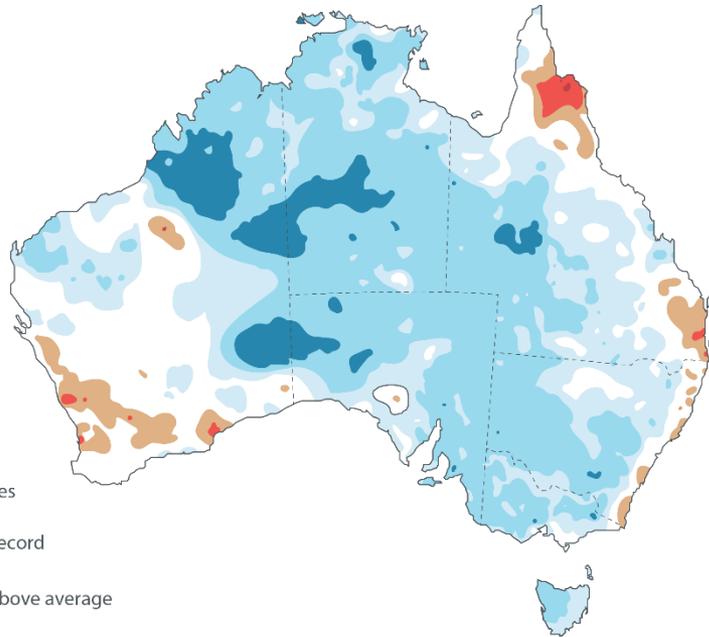
# A global challenge

- 40 per cent of the world's people are affected by water scarcity (High Level Panel on Water, 2018)
- More than 50 per cent of the world's cities and 75 per cent of all irrigated farms are experiencing water shortages on a recurring basis (The Nature Conservancy, 2016)
- Water crises have been named as one of the top five global risks in terms of impact every year since 2012 (World Economic Forum, 2018)
- The Asia-Pacific region requires US\$800 billion in investment over the period 2016–2030 in water and sanitation infrastructure – ADB's sovereign water portfolio is growing to an estimated US\$5 billion a year by 2020 (ADB, 2018)

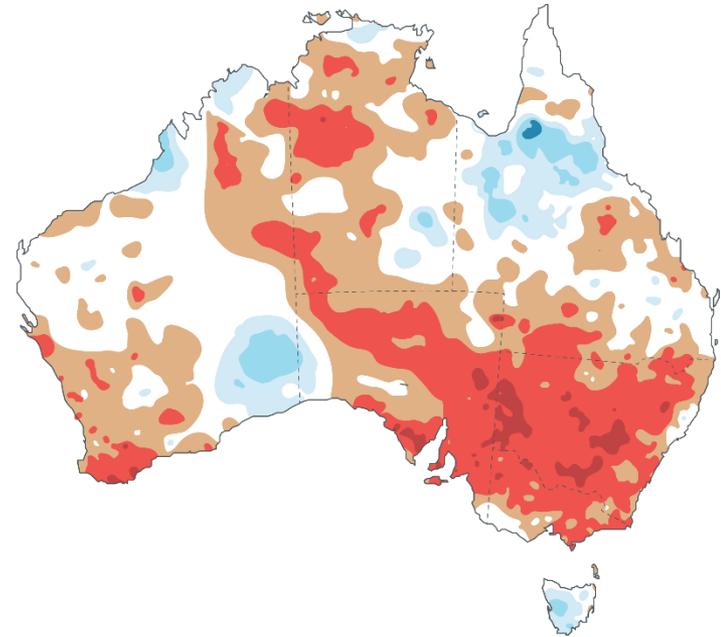
# Context

- The net effect of adopting effective water policies could be equivalent to more than a 10 per cent boost in GDP growth in some countries (World Bank, 2017)
- Strong business case for improving policy and strategy and the evidence to support this
- Australia has lived this journey

# Baseline is scarcity and variability

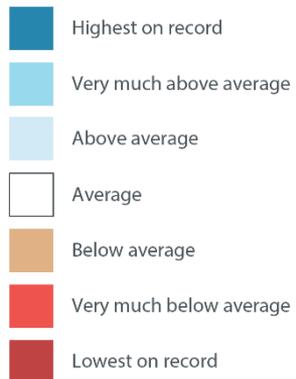


1 Feb – 31 July 2016

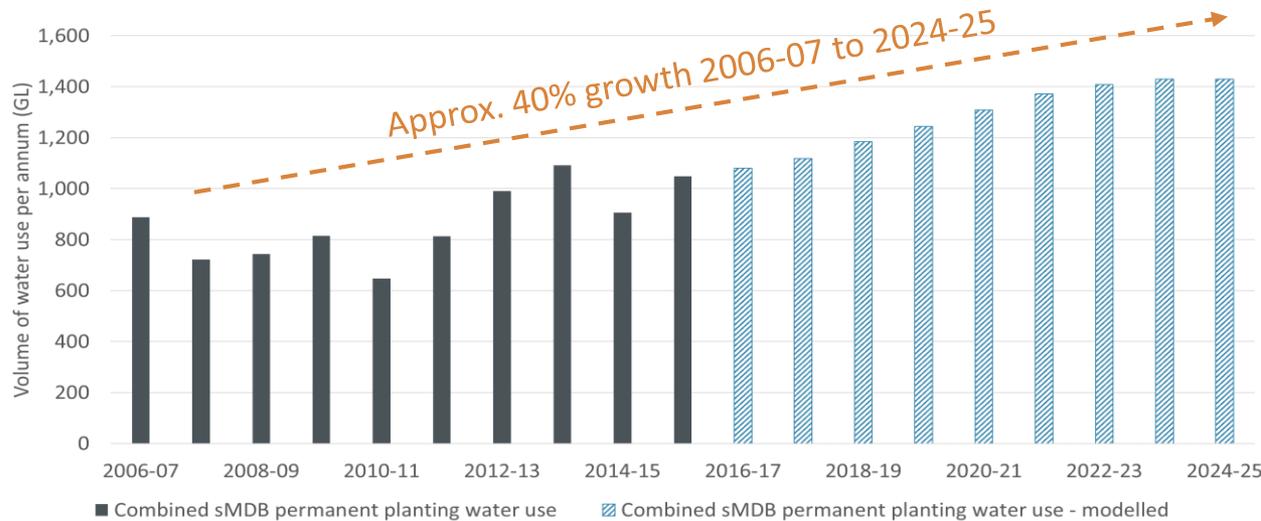


1 Feb – 31 July 2018

Rainfall Decile Ranges



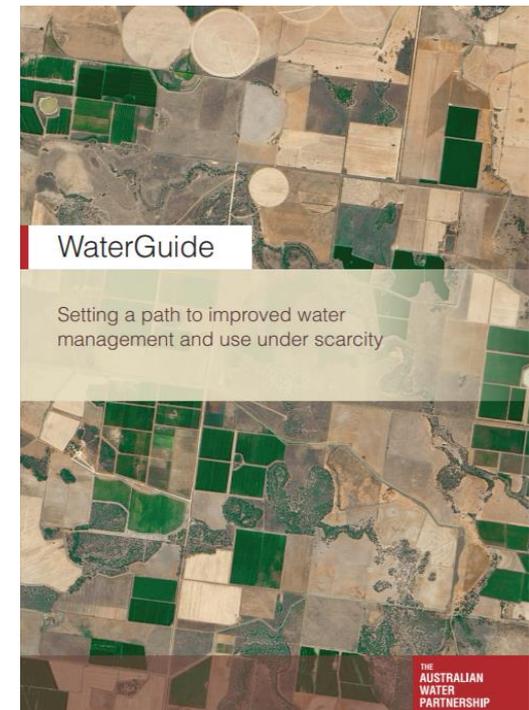
# Realising the benefits of water reform



Estimate of permanent plantings by water use (GL) southern Murray-Darling Basin, 2006-07 to 2024-25

# Australia's offer with WaterGuide

- Committed to sharing our experience
  - Including to complement the contribution of our Water Tools
- We recognise that water management is context-specific
- So are focused on
  - Universal lessons
  - Delivering on local needs
  - Practical action to accelerate progress



# WaterGuide framework

Confirm a vision for water management and the value of water

Understand changing water availability and demand over time

Ensure effective water policies and institutions



Pursue increasingly efficient water management and use

Develop resilient water infrastructure and services

Allocate water between different uses

# WaterGuide activities to date



Development and socialisation



Application through piloting

**End 2016**

Draft framework presented at the **World Water Congress, Budapest Water Summit and The Nature Conservancy Global Water Summit**



**End 2016**

Draft framework presented to **World Bank Group, Washington D.C.**



**March 2017**

1st edition of WaterGuide published



**June 2017**

WaterGuide application referenced in the **High Level Panel on Water Water-Use Efficiency Roadmap**



**July 2017**

WaterGuide presented to **Asian Development Bank, Philippines**



**August 2017**

Jordan-Australia WaterGuide Dialogue



**Beginning 2017**

WaterGuide presented at **Stockholm World Water Week and Asia Water Week, South Korea**



**January 2018**

Iran-Australia WaterGuide Dialogue



**January 2018**

Mexico-Australia WaterGuide Dialogue



**February 2018**

Senegal-Australia WaterGuide Dialogue



**February 2018**

Jordan-Australia Water Reform Collaboration



**March 2018**

WaterGuide used as a framework to develop 'A Guide to Managing Water for the Environment' as an Australian contribution to the **High Level Panel on Water**



**March 2018**

2nd edition of WaterGuide published and launched in **Brasilia** at the **8th World Water Forum** and referenced in the **High Level Panel on Water outcome document**



**July 2018**

**Next phase of Jordan-Australia Water Reform Collaboration commenced**



# Iran



## WaterGuide

### Iran Australia WaterGuide Dialogue

Date: 6-7 Jan 2018 Location: Provincial Water Authority, Tabriz

تاریخ: ۱۶ و ۱۷ دی ماه ۱۳۹۶ مکان: شرکت آب منطقه‌ای استان آذربایجان شرقی

حکمرانی و سیاست گذاری آب

Logos: AIHER, Global Change, Ministry of Water Resources, Ministry of Environment, Urban and Climate Change, Ministry of Energy

## Environmental Water Management

### Iran Australia WaterGuide Dialogue

Date: 9-10 Jan 2018 Location: Department of Environment, Pardisan Park, Tehran

مدیریت حقایق آب و زیست محیطی  
تاریخ: ۱۱ و ۱۰ دی ماه ۱۳۹۶ مکان: تهران، پارک پردیسان، سازمان حفاظت محیط زیست

Logos: AIHER, Global Change, Ministry of Water Resources, Ministry of Environment, Urban and Climate Change, Ministry of Energy



## Water Market Development

Iran Australia WaterGuide Dialogue  
Ministry of Commerce, Tehran



### Australia Extends Water Management Expertise

Water authorities from Iran and Australia met in a two-day conference titled "Water Guide Dialogue" in Tabriz, East Azarbaijan Province, late last week, to discuss Iran's water crisis. Given Australia's successful experience in setting efficient water policies in the battle against drought and its climatic similarity to Iran, the dialogue was held to make use of the country's expertise in the field, IRNA reported.

Will Farker, the head of Australian delegation, underlined the strong effect of water on both political and economic affairs, and suggested involving the private sector in water management programs both in the industrial and household sectors.

"What has remained from the country's water resources should be tactfully monitored and controlled," he said.

"Large-scale agriculture with limited water has been a radical challenge in Australia too, but what we do is to make a balance between consumption and preservation."

Farker concluded that a comprehensive plan should be integrated. Pointing to the sensitivity of water scarcity in Iran and the main role of public in curbing the issue, Kalamantan said the society will not care about the growing problem until they personally feel the effects of drought on their own and the next generation's lives. Iran is a semi-arid country that has long been struggling with drought. Yet, about 92% of the country's water resources are used up by unsustainable and wasteful farming practices.

Experts predict that the country's water scarcity will hit crisis level by 2025, when renewable water will be less than 1,000 cubic meters per capita, down from 2,000 cubic meters in 1950.

They say if water consumption patterns do not change in the near future, many parts of the country will turn into barren desert and entire towns and villages will become uninhabitable.

The event held on Jan. 6-7 was a follow up of "Governance and Public Policy" conference held in Sharif University of Technology in Tehran on Friday.

تاریخ: ۱۸ دی ماه  
مکان: تهران، وزارت بازرگانی

Logos: AIHER, Global Change, Ministry of Water Resources, Ministry of Environment, Urban and Climate Change, Ministry of Energy

# Mexico



## WaterGuide and the Australian experience on scarcity and drought visited Baja California

AITHER and ARCOWA consultancies, supported and sponsored by the Government of Australia and the Australian Water Partnership (AWP), visited our country from 15 to 19 January, in order to present the tool: WaterGuide, a guidance document designed and based on decades of the Australian experience on the management and efficient use of water resources in the face of water scarcity and availability variation. The guide is a contribution to the UN High Level Panel on Water and the World Bank.



WaterGuide is a framework designed to help decision makers and stakeholders to develop practical paths to improve water management under scarcity and variability conditions, by diagnosing problems and identifying appropriate instruments to address them, such as political, technical,



# Senegal



# Jordan



## Jordan WaterGuide Dialogue

POSTED ON 29 SEPTEMBER 2017 CATEGORIES: DROUGHT, JORDAN, WATER SCARCITY NO COMMENTS YET



AWP Partners and DFAT recently conducted a mission to Jordan on the topic of managing water scarcity that involved the first application of the recent AWP publication WaterGuide. WaterGuide, published in March 2017, was prepared by Huw Pohlner and Will Fargher of Aither at the request of the Australian Department of Foreign Affairs and Trade, as a part of AWP support provided to the World Bank/UN High-Level Panel on Water.

In April 2017, the Jordanian Minister of Water and Irrigation, HE Dr Hazim El-Naser, approached AWP to request Australian assistance to 'define a set of potential activities, drawing inspiration from the WaterGuide, including a country diagnostic of challenges and opportunities for reform and pro-active management, identifying policy priorities and potential innovative approaches on water scarcity and drought management'. This was the first formal WaterGuide-related approach to the Australian Government since the publication of the report.



Australian Government  
Department of Foreign Affairs and Trade

### MEDIA RELEASE

MINISTER OF WATER AND IRRIGATION, HASHEMITE KINGDOM OF JORDAN

His Excellency Dr. Hazim El-Naser

AUSTRALIAN AMBASSADOR TO JORDAN

His Excellency Mr. Miles Amitage

17 August 2017

### JORDAN AND AUSTRALIA COLLABORATING ON WATER SCARCITY

The Governments of Jordan and Australia are pleased to announce the Jordan-Australia Water Reform Collaboration. A unique practical solutions to the challenge of water scarcity in Jordan. The countries in the world, and its limited water supplies are under increasing pressure from population growth, climate change, and the current refugee crisis.

The Dialogue was held in Amman, hosted by the Jordanian Ministry of Water and Irrigation. It brought together Jordanian and Australian water management policymakers and experts from Australia and Jordan to discuss the challenges and opportunities for reform and pro-active management, identifying policy priorities and potential innovative approaches on water scarcity and drought management.

The Dialogue is informed by WaterGuide, a framework for water management and use in response to water scarcity. WaterGuide draws on the experience of Australia and Jordan in responding to water scarcity and drought, and is a practical contribution to the Jordan-Australia Water Reform Collaboration on Water, of which Jordan and Australia are both members.

Minister Dr. El-Naser noted, 'WaterGuide provides our two countries with a practical partnership. This WaterGuide Dialogue should allow us to work together on water policy and experts can accelerate our reform goals'.

Key areas of collaboration identified in relation to water management, better understanding water supply and demand, and the allocation of water between uses; ensuring sustainable water management efficiency.

Mr. Miles Amitage stated, 'In the context of the growing global water scarcity, helping countries wanting to improve water management in the region is a priority for Australia'.

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Jordan-Australia Water Reform Collaboration



# Putting WaterGuide into practice



One.

Appreciation of each others experience

Two.

Discussion of country level priorities

Three.

Identification of priority areas for collaboration and mutual learning

Four.

Shortlist of practical initiatives to take forward in future phases

# Three phases of cooperation in Jordan

- **Phase 1** (July-Dec 2017): Initial policy dialogue; establishment of Jordan-Australia Water Reform Collaboration
- **Phase 2** (Jan-June 2018): Refinement of priorities for collaboration; preparation of bridging project scopes
- **Phase 3** (July-Dec 2018): Completion of bridging projects
- **Next phase** (TBC): Completion of detailed work on priority projects

# Insights from implementation

- Unsustainable surface water and/or groundwater use
- Cities, towns and industries are experiencing shortages
- Significant environmental assets at risk or in terminal decline
- The need for reform and reallocation is recognised
- Solutions are available but hampered by constraints (information, political, financial, capacity, etc.)
- WaterGuide implementation to date shows promise in structuring partnerships and pathways for practical action

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Asian Development Bank

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