



24<sup>th</sup>ICID 3rd IEC MEETING

3<sup>RD</sup> OCT - 10<sup>TH</sup> OCT 2022 ADELAIDE | SOUTH AUSTRALIA









# ADELAIDE 2022

www.icid2022.com.au





# About ICID



#### International Commission on Irrigation and Drainage (ICID)

The International Commission on Irrigation and Drainage (ICID), established in 1950 is a leading scientific, technical, international not-for-profit professional organisation with members in 78 countries. The professional network consists of experts from across the world in the field of irrigation, drainage, flood management, and the wide spectrum of agriculture water management. The main mission is to promote 'Sustainable agriculture water management' to achieve a 'Water secure world free of poverty and hunger through sustainable rural development'. ICID is a knowledge sharing platform dedicated to issues that covers the entire spectrum of agricultural water management practices ranging from rainfed agriculture to supplemental irrigation, land drainage, deficit irrigation to full irrigation, etc. In addition, drainage of agricultural lands forms a core theme of the commission's activities. Floods and drought; the two extremes of increasingly variable climate as a result of potential climate change, also form the focus of activities.

#### Mission

To work towards sustainable agricultural water management through inter-disciplinary approaches to economically viable, socially acceptable and environmentally sound irrigation, drainage and flood management.

#### Vision

Water secure world, free of poverty and hunger achieved through sustainable rural development



# About Irrigation Australia



#### Irrigation Australia Ltd

Irrigation Australia (IAL) was founded in 2007, following the merger of Australian National Committee on Irrigation and Drainage (ANCID) and the then Irrigation Association of Australia (IAA). It is Australia's peak national organisation representing the Australian irrigation industry in all sectors from water users, consultants, designers and installers through to educational institutions, government, manufacturers and retailers. IAL is also the Australian representative body of the International Commission on Irrigation and Drainage (ICID). Irrigation Australia is a member based, not-for-profit, organisation with its national office in Brisbane, Australia.

#### Vision

To lead the Australian irrigation industry.

#### Mission

As the national representative body of the Australian irrigation industry, Irrigation Australia will:

- Provide value and service for its members
- Be the prime source of irrigation-related knowledge for all stakeholders
- Support economic sustainability in Australia by providing professional development for the irrigation industry

Visit the Irrigation Australia website at www.irrigationaustralia.com.au





Irrigation Australia is a registered training organisation (RTO 91313) providing the industry with nationally accredited training and qualifications. Irrigation Australia is committed to improving industry standards by working closely with federal, state and local government as well as other stakeholders to improve water efficiency and increase land productivity.



# **Welcome**A Message from ICID President Prof. Dr Ragab Ragab

It is my great honour to announce that in a post COVID-19 environment the 24th ICID International Congress on Irrigation and Drainage with the Theme: "Innovation and research in agricultural water management to achieve sustainable development goals" together with the 73rd International Executive Council Meeting will now be held in Adelaide, Australia from 3 October to 10 October 2022.

Unfortunately, we could not organise this event as originally scheduled in 2020 at Sydney, Australia and had to postpone it repeatedly due to evolving situation of COVID 19 pandemic. However, we are happy to announce that we will now be able to convene at Adelaide next year. All this has come about with sustained and whole hearted efforts of ICID and Australian National Committee (IACID) and Irrigation Australia.

On behalf of ICID and Irrigation Australia, I would like to extend my warm invitation to ICID members and all other stakeholders throughout the world, to join with me and attend this flagship global event in Australia. Together, we promise you an enriching experience in irrigation and drainage disciplines.

Australia joined ICID in 1952 and has since been actively associated with ICID activities at national as well as international level. The Australian National Committee (IACID) hosted the 10th IEC at Canberra in 1959, the 34th IEC at Melbourne in 1983; the 5th Afro-Asian Regional Conference at Townsville in 1985; the 4th international micro irrigation congress in Albury-Wodonga in 1988; the 2nd Asian Regional Conference at Echuca/Moama in 2004 and the 63rd IEC and 7th Asian Regional Conference at Adelaide in 2012. Australia has a vast repertoire of experience to offer in the fields of irrigation, drainage and water management.

Adelaide, the capital of South Australia, is a beautiful city that is home to around one million people. There is a diverse range of landscapes surrounding the easily accessible city, including the Torrens River, green parklands, the Mount Lofty Ranges, and coastal beaches. Referred to as the wine and festival capital of Australia, Adelaide is a great place to experience the rich arts and culture, widely known as "the festival state of Australia". Northeast of Adelaide city is the Barossa Valley a renowned wine-producing region with an array of high-profile wineries offering tours and cellar-door tastings. Shiraz grapes are the local speciality.

I am sure Irrigation Australia and the ICID Australian National Committee (IACID) will not leave any stone unturned for the success of the 73rd IEC Meeting & 24th ICID Congress and combined with Irrigation Australia's National Conference and Exhibition delegates can be ensured of great hospitality and a rich learning experience.

IACID will be organizing very interesting programmes for the accompanying persons as well as study tours for the participants including places of historic importance. Further information on this important event is detailed in this revised edition of the 2nd Announcement.

I extend a cordial invitation to all the prospective delegates for the 24th ICID Congress & 73rd IEC meeting combined with the Irrigation Australia National Conference & Exhibition in Adelaide, Australia.

I am looking forward to meeting you there.

Prof. Dr Ragab Ragab

**ICID President** 



## WELCOME FROM THE PREMIER OF SOUTH AUSTRALIA

On behalf of the Government of South Australia I'm delighted to officially welcome delegates of the 24th International Commission on Irrigation and Drainage Congress and 73rd International Executive Committee Meeting 2022 to Adelaide, South Australia.

Adelaide is the ideal business event destination, with one of the quickest airport-to-city transfers anywhere in the world. We are home to Australia's best connected business, events and entertainment precinct – with the Adelaide Convention Centre conveniently situated adjacent to a range of hotels, including the brand new Adelaide Oval hotel and EOS by SkyCity which features a rooftop bar overlooking the precinct. This connectivity makes the destination easily walkable and will ensure that delegates can maximise their time enjoying our beautiful

For those that linger longer, Adelaide is the gateway to some of the best food and wine regions in the World, including the Barossa Valley, which is home to major brands such as Penfolds, and McLaren Vale; both less than an hour's drive from the city centre. For unique and accessible wildlife, the beautifully preserved Kangaroo Island is host to kangaroos, koalas, sea lions and all manner of fauna, whilst Port Lincoln is home to the Great White shark, Southern Bluefin tuna and Coffin Bay oysters.

In addition to our enviable lifestyle, South Australia is considered a global leader in many aspects of water, particularly in irrigation. Our irrigators typically achieve 85% efficiency in water use, which is essential for our international export and investment competitiveness. As Australia continues to recover economically from the impacts of COVID-19, the irrigation and water industries will be even more essential as foundational enablers of growth across key industries. I encourage you as leaders in your sector to utilise this congress as a catalyst for new thinking and innovation, with an eye to the nation's future prosperity.

Adelaide has a great deal to offer visitors from all around the world and we look forward to welcoming you to our inspiring destination in October 2022.

Yours sincerely,

Hon Steven Marshall MP

PREMIER OF SOUTH AUSTRALIA



**Premier of South Australia** Steven Marshall



#### A Message from Irrigation Australia

COVID-19 disrupted events on a global scale and Irrigation Australia was not immune from the impact of this pandemic. We were very disappointed not to hold the 24th Congress & 71st IEC Meeting, combined with the biennial Irrigation Australia Conference & Exhibition as scheduled in 2020. After our efforts to win the right to host this event and the extensive planning and work undertaken, we were very determined that the event could still be held in a post-pandemic environment. The date and location may have changed but the enthusiasm, commitment and warm hospitality of the organising committee has not.

Accordingly, on behalf of Irrigation Australia and the ICID Australian National Committee (IACID) we extend a warm invitation to you to participate in the 73rd IEC Meeting & 24th ICID Congress combined with the Irrigation Australia National Conference & Exhibition to be held in Adelaide, Australia from 3 October to 10 October 2022.

The Australian irrigation industry is delighted to have the opportunity to host this event and showcase our irrigated agricultural industry to the world. To add value to your participation in the International Congress, we have combined it with our biennial Irrigation Australia Conference and Exhibition, the biggest irrigation event in the southern hemisphere. ICID delegates will be able to attend the local conference sessions and our large international exhibition in addition to the comprehensive ICID program.

The theme for the 24th ICID Congress is 'Innovation and research in agricultural water management to achieve sustainable development goals'. Australia is the driest continent on earth and the efficient use of water is at the forefront of our objectives and strategies to expand our domestic production of food production and to maintain our reputation as an exporter of high-quality foods to a growing world population.

The event will be hosted in Adelaide, which is Australia's 5th largest city and home to a vibrant culture of arts, culture and great food. It is renowned for its fantastic places to visit and close proximity to some of the leading agricultural production in Australia. The famous wine producing region of the Barossa Valley is easily accessible on a day trip from the city and here you can experience some of the finest wines and cellar doors in Australia, and in fact the world. The organising committee will be arranging a selection of interesting and informative study tours and further details on these will be released during 2021. Registrations and an invitation to submit abstracts will re-open in 2021 but you are welcome to register your interest now to ensure you receive communications to keep you updated with what will be an exciting and important event on the international irrigation calendar.

It is a great privilege to be awarded the opportunity to host the International Congress, which is being held in southern hemisphere for the first time since its inception in 1951. We hope that you plan well ahead to attend this event and take this long-awaited opportunity to catch up with old acquaintances, make new friendships and enjoy some 'true blue' Australian hospitality.

If you have any questions or require assistance, please do not hesitate to contact us via email at icid2022@irrigation.org.au.

We look forward to seeing you in 2022 in Adelaide.



Andrew Ogden
Chairman
Irrigation Australia





Momir Vranes
Chairman
IACID Australian
National Committee





Bryan Ward
Chief Executive Officer
Irrigation Australia



# Irrigation Australia's Committee on Irrigation and Drainage (IACID)

#### **Momir Vranes**

Chair, IACID

Consultant, Water Resources Management

#### **Tony Slatyer**

Consultant

#### **Peter Durand**

**Business Development Manager, Netafim** 

#### **Geoff Harvey**

National Training, Certification & Marketing Manager, Irrigation Australia Limited

#### **Peter Hayes**

Industry Consultant, Strategy, R&D and Innovation, Wine Sector

#### Karlene Maywald

Managing Director, Maywald Consultants Pty Ltd

#### **Eddie Parr**

Principal, Ammerdown Environmental Services

#### **Michael Scobie**

Research Engineer (Irrigation and Water Resources), Centre for Agricultural Engineering

#### **Carl Walters**

Manager Sustainable Irrigation, Goulburn Broken Catchment Management Authority

#### Bryan Ward

CEO, Irrigation Australia Limited

#### **Isaac Jeffrey**

CEO, National Irrigators Council

#### **Committee Secretariat**

Ms Chris Delphin Irrigation Australia Business Adminstration Manager & Company Secretary

#### **Patrick Johnson**

Young Irrigation Professionals Representative







It's a way of showing respect to the people who have lived in Australia for 50,000 years. Aboriginal Australians are one of the oldest living populations in the world.

#### THERE ARE MANY DIFFERENT **INDIGENOUS CULTURES**

Australia has two Indigenous peoples. They are Aboriginal people and Torres Strait Islander people. Aboriginal Peoples inhabited the whole of Australia, and Torres Strait Islanders lived in the islands between Australia and Papua New Guinea.

Once there were over 500 different Aboriginal Nations - so there's no single 'Aboriginal culture,' there are many.

Their cultures do have some common themes, though, such as the Dreaming and a deep connection to the land.

#### THEY ALSO HAVE MANY **DIFFERENT LANGUAGES**

It's estimated that there were around 250 different languages spoken in Australia before the British arrived in 1788.

The National Indigenous Languages Survey Report 2005 found that only about 145 Indigenous languages are still spoken and that many of those were also in danger of disappearing.

In 2016 the Australian National Dictionary listed around 500 words which were in common usage coming from 100 different Aboriginal languages. Many of them are the names of plants, animals and places, so you probably already know a few like:

- Kangaroo
- Wallaby
- Canberra (which means meeting place)

#### THEIR SPIRITUALITY IS HIGHLY COMPLEX

The Dreaming or, the Dreamtime, is a similarity that runs through different Indigenous belief systems and is a concept that is often not easily understood by non-Indigenous people. The phrases Dreaming and The Dreamtime are English translations that don't capture the true meaning.

There is no afterlife in Indigenous Australian religions, no heaven or hell, which sets them apart from many other world religions. The Dreaming is the source of life philosophy and morality and while it's intertwined with Indigenous stories of creation, is also a constant state where both the past and the present exist together. In attempting to explain the Dreaming, anthropologist W.E.H. Stanner used the term 'everywhen'.

#### THERE ARE MANY PLACES YOU CAN VISIT TO LEARN MORE ABOUT INDIGENOUS CULTURE.

There are still many places in Australia where you can get in touch with Indigenous culture.

Probably the most well-known place is Uluru also known as Ayers Rock. The ancient monolith is sacred to the Yankunytjatjara and Pitjantjatjara people. It's visited by thousands of people every year. We recommend one of the beautiful walking tours you can take around Uluru.

> The Flinders Ranges in South Australia have ancient rock paintings that are accessible to the public,

> > as does Ku-ring-gai Chase National Park in NSW and The Grampians National Park in

Victoria.

To learn more about Indigenous Australians culture and history, we also highly recommend The Australian Museum's website.

SOURCE:insiderguides.com.au/australianindigenous-culture/

# brief overview

ADELAIDE, SOUTH AUSTRALIA AND AUSTRALIA

# Northern Territory Queensland South Australia New South Wales ACT Victoria

#### **AUSTRALIA**

Australia is a country of striking landscapes, a rich ancient culture and one of the world's strongest economies. It is the sixth-largest country in land area and is the only nation to govern an entire continent.

With a spectacular natural environment, high quality of life and great diversity, Australia is a sought after destination for international tourists. It has 10 per cent of the world's biodiversity and a great number of its native plants and animals exist nowhere else on earth.

From tropical rainforests in the north

to the red deserts of the centre, from
the snowfields of the south-east to the
Australian Antarctic Territory, it is a vast and
varied land. Australia has many World Heritage
sites including the Great Barrier Reef, UluruKata Tjuta National Park and the Sydney Opera
House.



South Australia is renowned as a relaxed region full of wine, wildlife and natural wonder. Undulating wine regions produce classic Australian wine, migrating whales glide along rugged coastline and koalas snooze among the treetops on wind-swept islands. Vast swathes of ochre outback, dramatic coastline, world-class wineries and historic towns and cities -you'll find it all in South Australia. The South East region of South Australia is an area of some 2.35 million hectares and is the largest, by area, of the irrigation areas in South Australia with around 55,450 hectares of land irrigated in 2008-09. Of this area 54% is applied to pasture and hay crops, 20% to vines and 5% to potation.

#### **ADELAIDE**

Adelaide consistently ranks highly for its quality lifestyle and as one of the world's most desirable cities to live in. Its cultural diversity is evident in all aspects of city life from shops and restaurants, to numerous music, theatre, dance and

visual arts events and festivals. It is a clean green city, known for its vibrant food and wine culture. From the city, an hour's drive or less can take you to as far north as Lyndoch in the Barossa

Valley, south to McLaren Vale or to Adelaide's tree-

lined boulevard, North Terrace, housing the city's most important cultural institutions from the Art Gallery of South Australia, the neighbouring South Australian Museum and the Botanic Gardens a short stroll away. The Adelaide Zoo is home to native Australian wildlife, koalas, Australian sea lions and kangaroos and if you love cricket, the Adelaide Oval is available for guided tours or visit the private collection of memorabilia from Australia's great Sir Donald Bradman.



# a short history of

IRRIGATION IN AUSTRALIA

#### 19th Century: Fledgling Industry

Irrigation in Australia started in the early 1800s, mainly through the initiative of individuals who developed water resources to ensure feed for livestock. The first government involvement in irrigation was in Tasmania in the 1830s. In the mid-1830s a rudimentary dam was built in the Clyde River which permitted irrigation of the property 'Raths', starting about 1885. This property appears to have been irrigated on a continuous basis since then, and almost certainly has the longest continuous record of irrigation in Australia. From this small beginning in Tasmania, irrigation development began in earnest in Australia.

#### 20th Century: A Time Of Growth

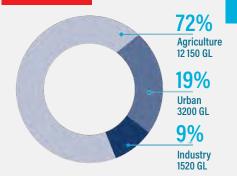
The Australian constitution provided the power to make grants to the states for specific purposes, and this enabled the Australian Government to play a major role in the development of the nation's water resources. The first major case of Commonwealth involvement in irrigation was through participation in the River Murray Waters Agreement. With the development of various

schemes, the rate of irrigation development grew rapidly. In the four years from 1988 to 1992, the total average diversion from the basin was 10,680 GL/year of which 95 per cent was diverted for irrigation. In response to growing concerns about the level of irrigation development and over extraction and excessive allocations, the Murray-Darling Basin Ministerial Council introduced a Cap on diversions. In 1995 the Cap resulted in an emphasis on achieving greater efficiency in water use.

#### 21st Century: A Time Of Reform

The Cap paved the way for more reform of water use in Australia with the setting up of the National Water Initiative (NWI) and the establishment of the National Water Commission (NWC) in 2004. Under the NWI, governments made commitments to prepare comprehensive water plans and achieve sustainable water use in over-allocated or stressed water systems. The NWC was an independent statutory authority with the key function to advise on the \$2b Australian Government Water Fund. During this time, the Australian and state governments undertook significant projects as a way of improving water use efficiency in agricultural irrigation. The commission was abolished in 2015. and in 2017 and with the enactment of the Water Act in 2007, the Murray-Darling Basin Authority (MDBA) was established as an independent expertise-based statutory agency. For the first time in the Basin's history, one Basin-wide institution is responsible for planning the Basin's water resources, with all planning decisions made in the interest of the Basin as a whole. For further information on the MDBA visit www.mdba.gov.au.

#### INTERESTING FACTS: AUSTRALIA & ADELAIDE



AUSTRALIA POPULATION
25.68 MILLION (JUNE 2020)
SOUTH AUSTRALIA - 1.76M
TOTAL SUNSHINE HOURS PER YEAR (ADELAIDE)
2516

#### **TEMPERATURE (ADELAIDE)**

January average temperature high/low 22 / 16 June average temperature high/low 13 / 7

- Record low: 8.8 (1924)
- Record high: 46.1 (1939)

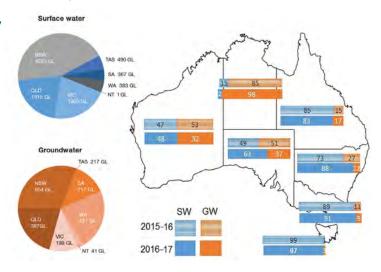
FIGURE 1. TOTAL BULK WATER ABSTRACTIONS BY CATEGORY IN 2017-18

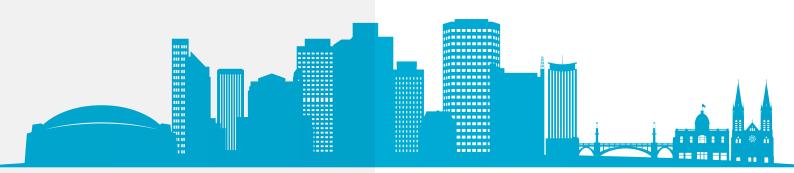
The statistics were sourced from the Bureau of Meteorology (BoM) and the Australian Bureau of Statistics (ABS).

FIGURE 3. PROPORTIONS OF SURFACE WATER (SW) AND GROUNDWATER (GW) IN AGRICULTURAL WATER ABSTRACTIONS IN EACH STATE AND TERRITORY. 2015-16 AND 2016-17

FIGURE 2. INTERSTATE ALLOCATION TRADE IN THE MURRAY-DARLING BASIN IN 2016-17







# congress overview and information

#### Venue

Adelaide Convention Centre North Terrace Adelaide SA 5000 T: +61 8 8212 4099 W. www.adelaidecc.com.au

The 24th ICID International Congress and the 73rd International Executive Council Meeting will be held at the Adelaide Convention Centre (ACC), one of the world's most modern, flexible and technologically advanced venues with seamlessly integrated buildings, and 20,000sqm of multipurpose space.

The ACC is positioned at the heart of Adelaide's Riverbank Precinct, just 15 minutes' drive from the Adelaide International Airport. In the midst of a multi-billion-dollar rejuvenation, the Riverbank Precinct is where the city's cultural, sporting, education, medical, conference and entertainment zones merge, helping make Adelaide Australia's Convention City.

#### **Dates**

3 October - 10 October 2022

#### **Host Organisations**

International Commission on Irrigation and Drainage and Irrigation Australia Ltd.

#### Language

The language of the conference will be in English.

#### Disclaimer

The Organising Committee shall not be liable for personal accidents or losses or damage to personal property of registered participants of the congress.



Registration fees do not include insurance of any kind. It is strongly recommended that all delegates take out their own travel and medical insurance prior to coming to the congress. The policy should include loss of fees/deposit through cancellation of your participation in the congress, or through cancellation of the congress itself, loss of airfares for any reason, medical expenses, loss or damage to personal property, additional expenses and repatriation should travel arrangements have to be altered. Neither the Congress Secretariat nor the Organising Committee will take any responsibility for any participant failing to insure. Please speak to your travel agent or airline in regard to this matter.

Whilst every attempt will be made that all features of the congress mentioned in this announcement will take place as scheduled, the Organising Committee reserves the right to make last minute changes as the need arises.

# congress theme

Innovation and Research in Agricultural Water Management to Achieve Sustainable Development Goals

# sub themes



# **Question 62:**

What Role can Information and Communication Technology Play in Travelling the Last Mile

(i.e. the greater adoption of research outputs)

Research has given the irrigation community many new technologies and continues to deliver new and innovative approaches to how to use water in irrigation to produce more to meet the adage "more crop per drop", whilst minimizing environmental impacts. Meeting this objective is becoming more critical as the world's population increases and the impacts of climate change become more visible.

However, the gap between the development of these new and innovative technologies and the widespread use of these technologies in systems and management continues to grow. This 'last mile' must be travelled if we are to meet the growing demands of the world's population for food and natural fibre. The efficiency with which we travel this last mile will have many components; this theme question addresses just one of these components. Information and communication technology offer tools and systems which may be used to speed up the adoption of research and development outcomes to produce more crop per drop and to minimise the impacts of irrigation in and to the environment. There are a range of other components to the adoption process including the policy environment, financial assistance and various types of incentives (both financial and nonfinancial), along with social and cultural influences. Information and communication technology have a role to play in all these and the diverse communities and individuals may adopt different processes and seek potentially different step outcomes. How can this tool be used effectively within different



socio-economic environments? We need to ensure that the appropriate tools are used for the different environments in which irrigation is carried out and for the desired outcomes. Will different tools be used for different desired outcomes within the same local environment/location?

#### **Sub Topics**:

#### **62.1: Technical - Technology Aspects**

- State (government) versus Non-State (private sector)
  - State Government level Hydromet services, high level technology including satellites, telemetry of data and availability of (free/) data to end-users, etc.
  - Non-State utilizing the above data, through user-friendly software, apps, assisting farmers and other involved making decisions on (irrigation, drainage) water management.
- · State versus Individual:
  - Making data available and accessible in remote areas availability of technological tools (information and communication).
- Open access platforms for freely interchanged data streams in standardized formats.

# 62.2: Social side - socio-economic Infrastructure Context: appropriate technology for appropriate resources (for diverse groupings of people) including using social media

- Developed versus countries-in-development and /or country regional diversity and in-country industry sector diversity
- Best practices, existing and possible, including technological training and support.
- Engaging women and families
- Common communities / industries e.g., cotton, dairying, rice etc.

#### 62.3: Water Trading:

 Net-based availability of water, water exchange and comparison platforms e.g., "Waterfind", waterexchange.com.au, etc.



In the past, research was undertaken by research organizations (universities, research focused government departments, etc.); policy development and implementation was the realm of government and their departments; ag extension was undertaken by Departments of Agriculture and Universities; and farmers and end-users were expected to just respond to the inputs from these outside of the end-use of irrigation water for crop production. **Environmental impacts were only** considered when they could no longer be catered for within the production system. The insular/silo approach had its downside with agronomic research not always being relevant to the needs of the end-users, implications of policy changes not fully understood or even anticipated, adoption of new and more effective ways of crop production was often

slow and farmer lead research and adoption not being recognised as pathways to improved production.

It is now recognised and better understood that previous approach to industry extension and achieving sustainable

development goals was not always effective.

Multi-disciplinary dialogue engages, by its definition, more than one discipline in design and implementation of policy, research, extension and adoption/use of processes that lead to sustainable development.

How can this multi-disciplinary approach be enhanced with improved interactions and new layers to more effectively engage in the attainment of sustainable development goals?

This Question seeks to draw out approaches that are being used and to stimulate thoughts on further enhancements to make the dialogue between all engaged in sustainable development more effective.

#### **Sub Topics**:

#### 63.1: Social, Consumer, Supply Chain QA, Reputation & Regulatory Dialogue

- Influence of supply-chain assurance (private, proprietary, national, international) on the production system-irrigation, drainage, water access and allocation, environmental impact including food security, at a national scale
- Social license, market access, enhance/protect reputation, managing crises
- Demonstrating environmental credentials and effective sustainable development, avoiding "green wash" etc.

#### 63.2: Technical level dialogue vs other "levels"

- Economic level
- Policy/Government level
- Legal level
- · Technological (tools, devices, systems) level
- · Safeguards (Environment, cybersecurity and social) level

## **63.3: Addressing the 12 Sustainable Development Goals of Responsible Consumption and Production**

- Supply Chain
- Social Licence
- Environmental Credentials

# SECOND ANNOUNCEMENT - ADELAIDE 2022 Program at a glance

#### Monday 3 October

08:45 - 18:00	Exhibition Bump-in
08:45 - 10:30	Registration Open
10:30 - 11:15	Health Break
11:15 - 13:00	ICID Management Board Meeting
13:00 - 14:00	Lunch Break - Exhibition Hall
14:00 - 15:45	Irrigation Australia Board Meeting
15:45 - 16:15	Health Break
16:15-18:00	Orientation Meeting with YPs
19:00-22:00	Dinner ICID Management Board & IAL Board

#### Tuesday 4 October

08:45 - 18:00	Registration / Exhibition
08:45 - 10:30	Congress Question 62.1 (1/2)
	Congress Question 63.1 (1/2)
	International Workshop-I (WG)
	International Workshop-I (WG)
10:30 - 11:15	Health Break
11:15 - 13:00	Congress Question 62.1 (2/2)
	Congress Question 63.1 (2/2)
	Congress Question 63.3 (2/2)
	International Workshop-II (WG)
	International Workshop-II (WG)
13:00 - 14:00	Lunch Break - Exhibition Hall
14:00 - 15:45	SE (IACID) - I
	SE (IWMI / WB) - I
15:45 - 16:15	Health Break
16:15 - 17:00	SE (IACID) - II
	SE (IWMI / WB) - II
	Orientation Meeting with GR/PEs
17:00 - 18:30	Welcome Reception in Exhibition Hall - Free for delegates

#### Wednesday 5 October

08:45 - 18:00	Registration / Exhibition
08:45 - 10:30	Opening Ceremony
10:45	Inauguration of Exhibition
10:30 - 11:15	Health Break
11:15 - 13:00	Congress Plenary
	N.D. Gulhati Memorial Lecture
	GR Presentation (Q. 62)
	GR Presentation (Q. 63)
13:00 - 14:00	Lunch Break - Exhibition Hall
14:00 - 15:45	Congress Question 62.2 (1/2)
	Congress Question 62.3 (1/2)
	Congress Question 63.2 (1/2)
	SS - AU / NZ
	SE (WB)-I

#### Wednesday (continued)

15:45 - 16:15	Health Break
	Congress Question 62.2 (2/2) Congress Question 62.3 (2/2)
16:15 - 18:00	Congress Question 63.2 (2/2) SE (WB) - II SC
18:00 - 19:00 19:00 - 22:00	Meeting - National Committes / Office Bearers Conference Dinner

#### Thursday 6 October

08:45 - 18:00	Registration / Exhibition	
08:45 - 10:30	IEC Plenary	
10:30 - 11:15	Health Break	
11:15 - 13:00	Special Session -I (1/2)	
	Symposium-I	
	TF-MTD	International Workshop
	Sub-Committee/ Theme	AC-IRPID Intl' WS
13:00 - 14:00	Lunch Break - Exhibition Hall	
14:00 - 15:45	Special Session -2 (2/2)	
	Symposium -II	
	TF-WWF-9	International Workshop
	MT-JOUR	Intl' WS
15:45 - 16:15	Health Break	
16:15-18:00	Wrap-up of 24th ICID Congress	
	Congress Question 62	
	Congress Question 63	
	Conference Wrap-up	

#### Friday 7 October

09:00 - 10:45	ASRWG-I	WG-SON-FARM-I	
	ERWG-I	WG-NCWRI	
	WG-ENV-I	WG-AFM-I	
10:45 - 11:15	Health Break		
11:15 - 13:00	ASRWG-II	WG-SON-FARM-II	
	ERWG-II	WG-W&C	
	WG-ENV-II WG-AFM-II		
		TT-TBW AWM	
13:00 - 14:00	Lunch Break - Exhibition Hall		
14:00 - 15:45	WG-VE-I	AFRWG-I	
	WG-RWH-I	IYPeF-I	
	WG-CLIMATE-I	Jt Session on ST, ON-FARM-I	
	PFC-I		
15:45 - 16:15	Health Break		
16:15 - 18:00	WG-VE-II	AFRWG-II	
	WG-RWH-II	IYPeF-II	
	WG-CLIMATE-II	Jt Session on ST, ON-FARM-II	
	PFC-II		
18:00 - 19:00	Office Bearers Committee (OBC) Meeting		



#### Saturday 8 October

09:00 - 10:45	AMRWG	WG-IDSST-I
	WG-SDTA-I	WG-WATS-I
	WG-MWSCD-I	C-CONGR-I
	EB-JOUR-I	
10:45 - 11:15	Health Break	
11:15 - 13:00	EB-JOUR-II	WG-IDSST-II
	WG-SDTA-II	WG-WATS-II
	WG-MWSCD-II	C-CONGR-II
13:00 - 14:00	Lunch Break - Exhibition Hall	
14:00 - 15:45	PCSO-I	
	WG-IOA-I	WG-M&R-I
	WG-HIST-I	WG-IDM-I
	WG-SDRG-I	WG-CDTE-I
15:45 - 16:15	Health Break	
16:15 - 18:00	PCSO-II	
	WG-IOA-II	WG-M&R-II
	WU-IUA-II	W U-IVIXII-II
	WG-HIST-II	WG-IDM-II

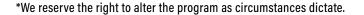
#### Sunday 9 October

09:00 - 10:45	PCTA
	YP - Workshop Training
10:30 - 11:15	Health Break
11:15 - 13:00	PCTA
	YP - Workshop Training
13:00 - 14:00	Lunch Break - Exhibition Hall
14:00 - 15:45	PCTA
	YP - Workshop Training
15:45 - 16:15	Health Break
16:15 - 18:00	PCTA
	YP - Workshop Training
18:00 - 19:00	Farewell Dinner   Free for delegates

#### Monday 10 October

09:00 - 10:45	IEC
10.00 11.15	Hanklik Burnik
10:30 – 11:15	Health Break
11:15 - 13:00	IEC
13:00 - 14:00	Lunch Break - Exhibition
13,00 - 14,00	Lulicii Dieak - Exilibitio
14:00 - 15:45	IEC
15:45 - 16:15	Health Break
10:40 - 10:10	nealth break
16:15 - 18:00	IEC
	Closing Ceremony
	Closing Ceremony
18:00 - 19:00	MB-11

All technical / cultural tours will be organized after closing of the event











24th CID International C o n g r e s s 73rd IEC MEETING

3<sup>RD</sup> OCT - 10<sup>TH</sup> OCT 2022 ADELAIDE | SOUTH AUSTRALIA

# **Students Awards**



# OPPORTUNITY FOR STUDENTS TO PRESENT & WIN AN AWARD

at the

Irrigation Australia Conference 5 - 7 October 2022





The combined International Commission on Irrigation & Drainage (ICID) Congress and Irrigation Australia Conference & Exhibition is being held from 3 October to 10 October 2022 in Adelaide, Australia. This will be the most significant irrigation event ever held in Australia. The ICID country membership network is spread over 78 countries across Africa, Americas, Asia and Oceania, and Europe, covering over 95% of the irrigated area of the world and we are expecting a large contingent of international visitors to attend.

To recognise our future leaders, students are encouraged to submit oral and poster papers that align with congress themes, and present their research to peers and professionals on this global stage. Papers considered by the Organising Committee to be the best, will be eligible for a Student Award as follows:

- three student awards for the best paper and oral presentation 1st \$1000, 2nd \$500 and third \$250\*
- two student awards for the best paper and poster presentation -1st \$500, 2nd \$250\*

Abstracts will be considered by a selection panel and a short list chosen to present at the event. The program will also provide opportunities for students to improve their skills development and networking.

The first 100 students registering and submitting an extended abstract as part of the student awards competition will receive a voucher to the value of \$150 (AUD) to attend the congress dinner on Thursday 7th October at the Adelaide Convention Centre where the student awards will be presented.

The closing date to submit abstracts is the 15 December 2021. The conference theme for 2022 is 'Innovation and research in agriculture water management to achieve sustainable development goals.'

Competing students must tick mark their online submission at the time of registration for abstract/paper submission. The purpose, the criteria and the process of 'Student Awards' is available at <a href="https://www.icid2022.com.au/student-awards">www.icid2022.com.au/student-awards</a>

#### We encourage students to take up this opportunity.

\* Prices above are in Australian Dollars

If you have questions please contact Irrigation Australia at info@irrigation.org.au



# registration

Registration for the ICID Congress will open in October 2021. Further registration details will be available on the event website www.icid2022.com.au



You must register to attend the Congress. Registration will include access to the Congress program and Exhibition. A Congress Dinner will take place on Wednesday 6th October - there will an additional fee to attend this event.

The 2022 Irrigation Australia Conference and Exhibition will be held concurrently to the ICID Congress. 24th ICID Congress registration includes access to all Irrigation Australia Conference sessions and Exhibition.

#### EARLY BIRD REGISTRATION RATES AVAILABLE UNTIL 7 March 2022.



fees	Early bird until 1 July 2022	Standard from 2 July 2022
MEMBER COUNTRIES Congress + Council Meeting Congress Only	USD \$750 \$600	USD \$800 \$650
NON-MEMBER COUNTRIES Congress + Council Meeting Congress Only	\$850 \$700	\$900 \$750
YOUNG PROFESSIONALS* / RETIRED PROFESSIONALS** Congress + Council Meeting Congress only	\$350 \$150	\$400 \$200
ACCOMPANYING PERSONS Congress + Council Meeting Congress only	\$250 \$150	\$300 \$200
DAILY REGISTRATION*** Congress only	NA	\$200
STUDENT REGISTRATION**** Congress only	\$100	\$150

#### LIST OF LEAST DEVELOPED COUNTRIES (AS OF FEBRUARY 2021)

#### GET 50% DISCOUNT ON REGISTRATION FEES.

- Afghanistan
- Angola
- Bangladesh
- Benin
- **Bhutan**
- Burkina Faso
- Burundi
- Cambodia
- Central African Republic
- Chad
- Comoros
- Democratic Republic of the Congo
- Djibouti
- Eritrea
- Ethiopia
- Gambia
- Guinea Guinea-Bissau
- Haiti
- Kiribati
- Lao People's Democratic Republic
- Lesotho
- Liberia
- Madagascar
- Malawi
- Mali
- Mauritania
- Mozambique
- Myanmar
- Nepal
- Niger
- Rwanda
- São Tomé and Príncipe
- Senegal
- Sierra Leone
- Solomon Islands
- Somalia South Sudan
- Sudan
- Timor-Leste
- Togo
- Tuvalu
- Uganda United Republic of Tanzania
- Yemen
- Zambia

The list will be updated when new decisions become available.

Congress Date: 5 October to 7 October 2022 Congress + IEC Dates: 3 October to 10 October 2022

All prices will include an additional 10% GST (Goods and services tax)

\*To be eligible for the young professional rate, professionals are required to upload their details during the online registration process or send a copy of their passport by fax or via e-mail. Please note that only those who were born in or after 1980 are eligible under this category.

\*\*To be eligible for the retired professional rate, professionals are required to upload their details during online registration process or send a copy of their passport by fax or via e-mail. Please note that only those who were born before or in 1958 are eligible under this category. \*\*\*This fee is applicable for those who will attend the Congress only

\*\*\*\*Student fee is USD \$150 (early bird \$100) - for Congress participants In order to benefit from the special fee, a submission of your status confirmation (approval letter signed by the Head of Department or copy of your status ID) must be uploaded during the online registration.

# sponsorship and exhibition opportunities

The triennial ICID Congress and annual IEC meeting typically draws in over 600 international delegates. The Irrigation Australia (IAL) Conference and Exhibition will be held concurrently with the ICID 24th International Congress and 73rd International Executive Council Meeting. The IAL Conference and Exhibition attracts around 400 delegates and the Exhibition, open to the public, has had in excess of 2,000 participants through the doors over the 3 days the exhibition is open.

The event provides a unique opportunity for participants to network and share their knowledge and expertise related to sustainable agriculture. This includes water management, irrigation, drainage, livestock and crop production – all important aspects that support stable agriculture production with the goal of improving water and food security. The delegates represent a range of government and nongovernment organisations including policy makers, program managers, scientists, agri-business representatives and not-for-profit development organisations.

To make events like this a success, we rely on the generous support of organisations and industry. The ICID's International Congress and International Executive Council Meeting held concurrently with our Irrigation Australia







Conference and Exhibition is a great opportunity for supporters and exhibitors to showcase and promote their organisation, products, technologies, and services, and to engage with delegates from around the world. Supporters can choose from a variety of sponsorship levels including sponsoring special events and food & beverage services. Recognition for support will be publicised in congress promotional materials, during the event, through our social media campaign and on the conference and the Irrigation Australia websites.

If you are interested in becoming a congress sponsor or booking an exhibition booth, please contact <a href="mailto:events@encanta.com.au">events@encanta.com.au</a> or visit our website at <a href="mailto:www.icid2022.com.au">www.icid2022.com.au</a> for details and to request a sponsorship prospectus.

We look forward to your organisation or agri-business support and participation in this exciting international event.



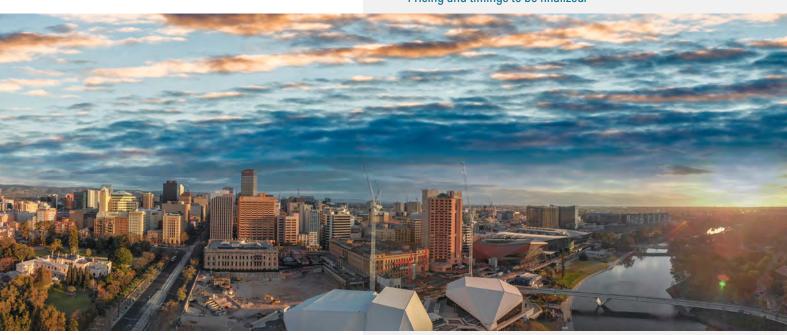


## tours

#### **Pre-Congress Tour**

Delegates will be able to participate in a tour showcasing Adelaide and the beautiful sites and surrounds that really reflect Australia and the iconic images many international visitors have come to know.

Pricing and timings to be finalized.





#### **Accompanying Person Tours**

We extend a warm welcome to all accompanying persons to Adelaide, Australia and to experience the sites and cultural activities that are on offer.

Be sure to indicate your interest in the accompanying persons' program and we will keep you updated on planned activities.

# optional tours at your leisure

Adelaide is a great place to visit and experience on your own. Here are some ideas of tours and activities you may wish to consider when planning your time in this iconic location.

#### Visit the Koalas at Adelaide Zoo

Visit Adelaide Zoo, home to more than 2,500 animals and 250 species of exotic and native mannals, birds, reptiles and fish over eight hectares of magnificant botanic surrounds. Set in a relaxing green city oasis and vibrant sanctuary Adelaide Zoo is the only major metropolitan zoo in Australia to be owned and operated by a conservation charity, Zoos South Australia.



#### Roof Climb or Tour Adelaide Oval



Two options for this iconic Adelaide Oval Experience:

1. Skip a pedestrian visit to the Adelaide Oval—one of the region's most recognized landmarks—for an excursion to the roof with unique city views. After a safety briefing and climbing into your suit and harness, follow your guide across a link bridge to an open viewing deck. From there, have the chance to walk a lean-out point 164 feet (50 meters) above the Oval's cricket field.

2. Enjoy an in-depth tour of the iconic Adelaide Oval that offers a behind-the-scenes look at

the famous sporting venue. Your knowledgeable guide shares both old and new features of the Oval during your 90-minute tour. Learn about the old scoreboard, the 100-year-old Moreton Bay fig trees, and the famous music groups and sports teams that have performed at the venue. Cricket fans can delve into cricket memorabilia at the Bradman Museum, also located within the Oval complex.

www.viator.com



#### Barossa Valley Wineries Tour with Tastings and Lunch from Adelaide

Visit South Australia's Barossa Valley wine region on this day trip from Adelaide that includes tastings at four wineries, plus a winery lunch. With a guide, discover Peter Lehmann, Chateau Yaldara and Langmeil Winery for a well-

rounded winery experience that introduces you to varietals from both established and newer wine producers. Learn insider facts about winemaking in this renowned region, and stop by other attractions like the Whispering Wall and Mengler's Hill

www.viator.com

# Kangaroo Island in a Day Tour from Adelaide

Travel from Adelaide to Kangaroo Island, one of Australia's most popular wildlife destinations, on this activity-filled day trip by ferry, flight or both—your choice. On the island, discover its natural attractions and local animals, from Vivonne Bay and Seal Bay Conservation Park to the Remarkable Rocks, Flinders Chase National Park, Admirals Arch and more. Spot wallabies, echidnas, fur seals, koalas and, of course, kangaroos.

#### www.viator.com

Dolphin Cruise from Adelaide with Optional Dolphin Swim

Look for dolphins off the coast of Adelaide on a dolphinspotting cruise from Glenelg, a seaside town just south of the city. As you glide across Holdfast Bay by catamaran, keep your eyes peeled for some of the thousands of dolphins who live in these waters. To enhance your encounter with these lovable creatures, upgrade your tour to include a dolphin-swimming experience from the boat.

www.viator.com

Cultural Caper Adelaide Walking Tour

This leisurely small-group walking tour explores the North Terrace area of Adelaide. Filled with cultural institutions and other public buildings, this mile-long avenue also boasts many historical buildings, including an 1838 church, the colonialera Ayers House, and the Adelaide Casino in a restored 1920s railway station. Tour highlights include Parliament House, Adelaide University, the War Memorial, and more.

www.viator.com





#### Adelaide Hills and Hahndorf Tour from Adelaide

Combine a food-tasting tour with views from Mount Lofty on an Adelaide Hills culinary tour. This multi-stop tour includes all transportation, eliminating the need to rent a car, and stops at some of the region's top food producers as picked by your foodie guide. Focus on the scenery on your journey through the countryside, stopping to taste cheese, chocolate, and wine.

A delightful German- style lunch with a glass of beer/wine is

included.

#### www.viator.com

# Adelaide Hills Tour with River Murray 3 Hour Lunch Cruise

Adelaide Hills Sightseeing prior to the River Murray Cruise.
On arrival to the river township of Murray Bridge we will board the Paddle Wheeler 'Captain Proud' and depart for our 3 Hour Cruise, relax on board as our Captain provides an interesting commentary on the river system including some Aboriginal folklore.
While you journey on the river, relax and enjoy the beauty and tranquility of the surroundings and indulge in a 2 Course Lunch. Take in the peaceful tranquility of the river red gums while spotting galahs, cockatoos, pelicans and kangaroos.

#### www.viator.com





With 38,000 pieces from around the world in its collection, you could easily spend a whole day lost in the halls of the Art Gallery of South Australia. In the city's West End, the Jam Factory Contemporary Craft and Design studio is a centre of excellence for the arts with four fabulous exhibition spaces and a retail gallery. Visit the French Renaissance-style Mortlock Wing at the State Library or lose yourself in history at the South Australian Museum. Get a hefty dose of culture at our massive Adelaide Fringe Festival, internationally-acclaimed Adelaide

Fashion Festival, The Adelaide Central Market is the largest undercover market in the Southern Hemisphere. Established in 1869 it has been a thriving hub of food and culture for more than a century. The North Terrace **Cultural Precinct is** the perfect place to discover more about South

up some art and architecture. Just next to the magnificent University of Adelaide and the UniSA campuses the Art Gallery of South Australia, South Australian Museum, State Library of South Australia and Migration

Museum are nearby. Just further along

reside wonderful institutions like the Samstag Museum, APY Art Centre Collective, JamFactory and Nexus Multicultural Arts Centre. Adelaide is the only city in the world that is built within a park. The Park lands cover an area larger than New York's Central Park - grab a bike and ride the Linear Trail along the River Torrens/Karrawirra Parri, explore the beautiful Himeji Garden which celebrates our Sister City relationship or watch the world go by.



#### COVID-19 Update

Encanta Event Management and the Organising Committee are closely monitoring COVID-19, and our congress planning is being shaped by the latest advice from Australian health and foreign affairs authorities.

The safety of delegates onsite is extremely important and we are working closely with the Adelaide Convention Centre and monitoring government safety guidelines to ensure that we are able to provide a safe onsite Congress experience.

We look forward to welcoming delegates from around the globe to ICID 2022.



#### Transportation

Air: If flying into Adelaide (Airport code: ADL). Adelaide's central business district is 6km from the International Airport and takes approximately 15 minutes via car.

Direct flights to Adelaide are available from several major international locations.

For further information, please visit: www.directflights.com.au



**Car:** You can arrange for car rental from one of several car rental agencies within the terminal. Just outside the terminal doors, local bus, taxi, limousine, wheelchair accessible transportation (arrange in advance) or shuttle services (to a few hotels) are available.



Taxi: Adelaide Airport to the central business district costs around AUD\$25.00.



**Bus:** There are several options to suit travellers include a JetBus Service and a SkyLink to take you direct to your hotel or Adelaide Metro Service.



For further information on the service that the Airport Link provides, please visit the following www.adelaideairport.com.au/parking-transport/transport-options/



#### Currency

The Australian dollar (sign: \$; code: AUD) is the currency of Australia. The dollar is composed of 100 cents (symbol ¢).

Denominations, Coins: 5¢, 10¢, 20¢, 50¢, \$1 and \$2. Purchases made in cash are rounded to the nearest five cents, purchases made with credit and debit cards are not rounded.

Denominations, Bills: \$5, \$10, \$20, \$50 and \$100 are the current bills in circulation.



#### **Electric Current**

In Australia, the standard voltage is 230 volts and the standard frequency is 50 Hz. Travellers from most nations in Asia, Africa and Europe should have appliances that work on the same mains voltage as Australia - therefore you will not need a voltage converter. Notable exceptions to this are Japan, USA and Canada which use 100/120V 50/60Hz.





If your country does use the same mains voltage as Australia all you need is a power adapter. This enables you to plug your appliance into the sockets in Australia. Simply put, you plug your appliance into the power adapter and then plug the power adapter into the wall socket in Australia.

The plugs in Australia have two flat metal pins shaped like a "V" or inverted "V" and some may contain a third flat pin in the centre.



#### Telephone

The Australian country code is 61. When calling from outside Australia, leave out the leading '0' from the STD area code or from the mobile telephone number.

Fixed line example calling Adelaide from outside Australia: +61 8 (local eight digit number).

Example calling a mobile from outside Australia: +61 4 (following eight digits of the mobile number)

The outgoing IDD access code from within Australia is 0011.



#### **Internet Access**

Free Wi-Fi will be provided during the congress at the International Convention Centre. In most cases, you should also have complimentary Wi-Fi service at your hotel. Free Wi-Fi service is also often available in local restaurants, coffee shops, malls and other local businesses.



Adelaide is on Central Standard Time (ACST) UTC +9.30.







Australia is a vast country and access to some of Australia's agricultural regions is remote and requires considerable travel time with limited flights available. Delegates interested in participating in post-congress technical tours, are requested to express an interest in the proposed tours recognising the indicative costs associated with delivering these tours. Based on delegate interest, the organisers will decide early in 2022 on the viability of these tours.

EXPRESS YOUR INTEREST icid2022.com.au



South Australia Langhorne Creek



Regional NSW
Incorporating Murrumbidgee and Colleambally
Irrigation (modernised channel systems),
environmental watering



Western Australia
Dairy Farming / Orchards / Truffles
and Vineyards



New Zealand
Water management, irrigation and food production

\*\*Stay tuned as further technical tours announced\*\*

# contact information

Irrigation Australia



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#### ICID•CIID

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#### ICID•CIID

# congress theme

Innovation and Research in Agricultural Water Management to Achieve Sustainable Development Goals

# congress contacts

event website

www.icid2022.com.au

congress enquiries

icid2022@irrigation.org.au

sponsor and exhibitor information

events@encanta.com.au

event managers

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