



Government of Western Australia
Department of Water and Environmental Regulation

PHCC

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Feb 2022





Our Values



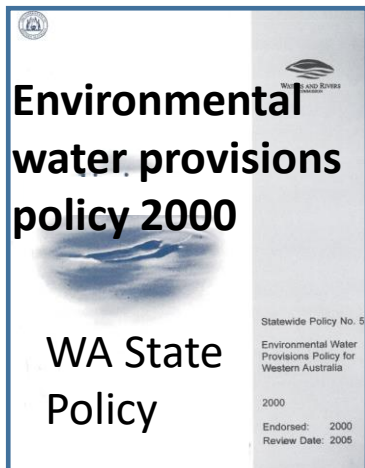


Water allocation planning – working to get the balance right



Water for
consumptive use

Water for the
environment





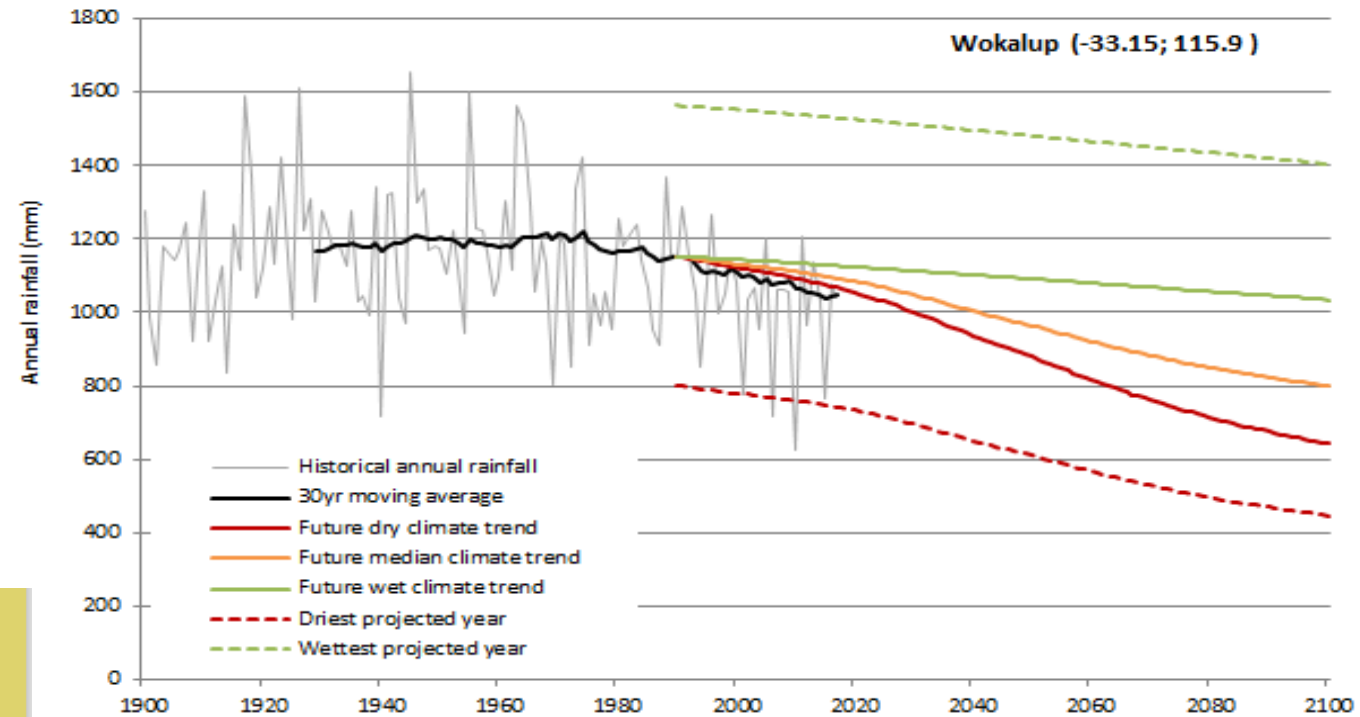
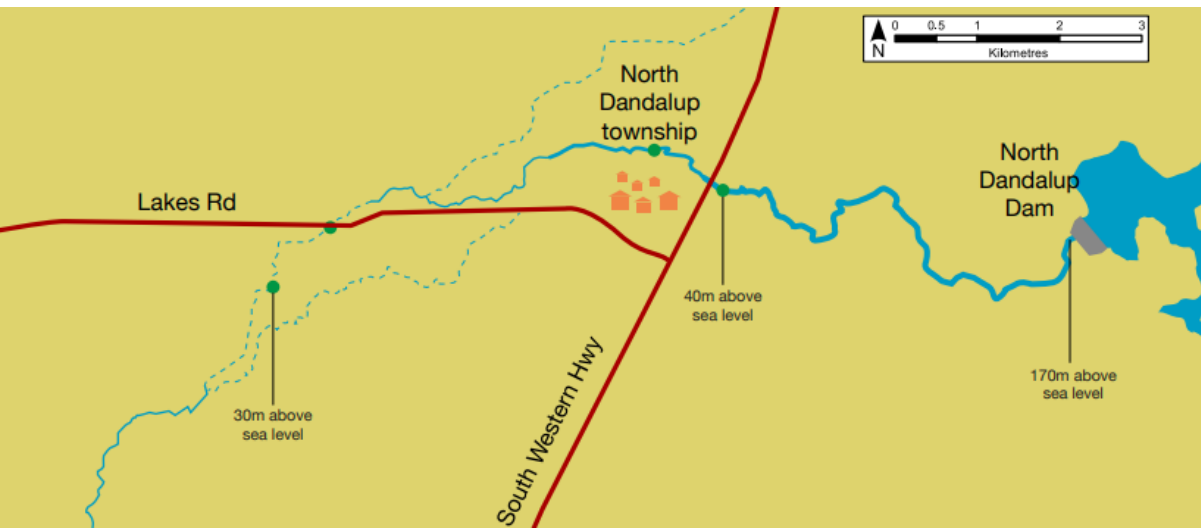
Balancing competing demands - perspectives



Balancing competing demands – challenge of climate change

Peel Coastal Groundwater Allocation Plan, PIWI & Murray Groundwater Evaluation Statement consistent messaging: no or limited water availability due to climate change

Dam operating strategies and releases reflect impact of climate





Water allocation plans & water licensing

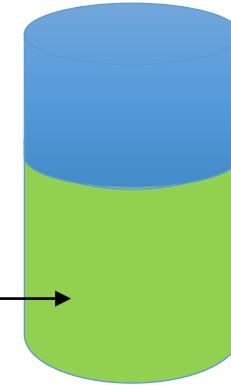
- Non statutory (this will change with the new Bill)
- Water licence is the key statutory implement under *RiWI 1914*
- Plans are a means to manage water licences at a collective and regional scale
- Models and climate projections support allocation decisions
- Environmental Water provisions Policy (2000) underpins allocation and licensing (essentially EIA)



Water Allocation Plans

How do we provide water for the environment when setting allocation limits?

Determined first



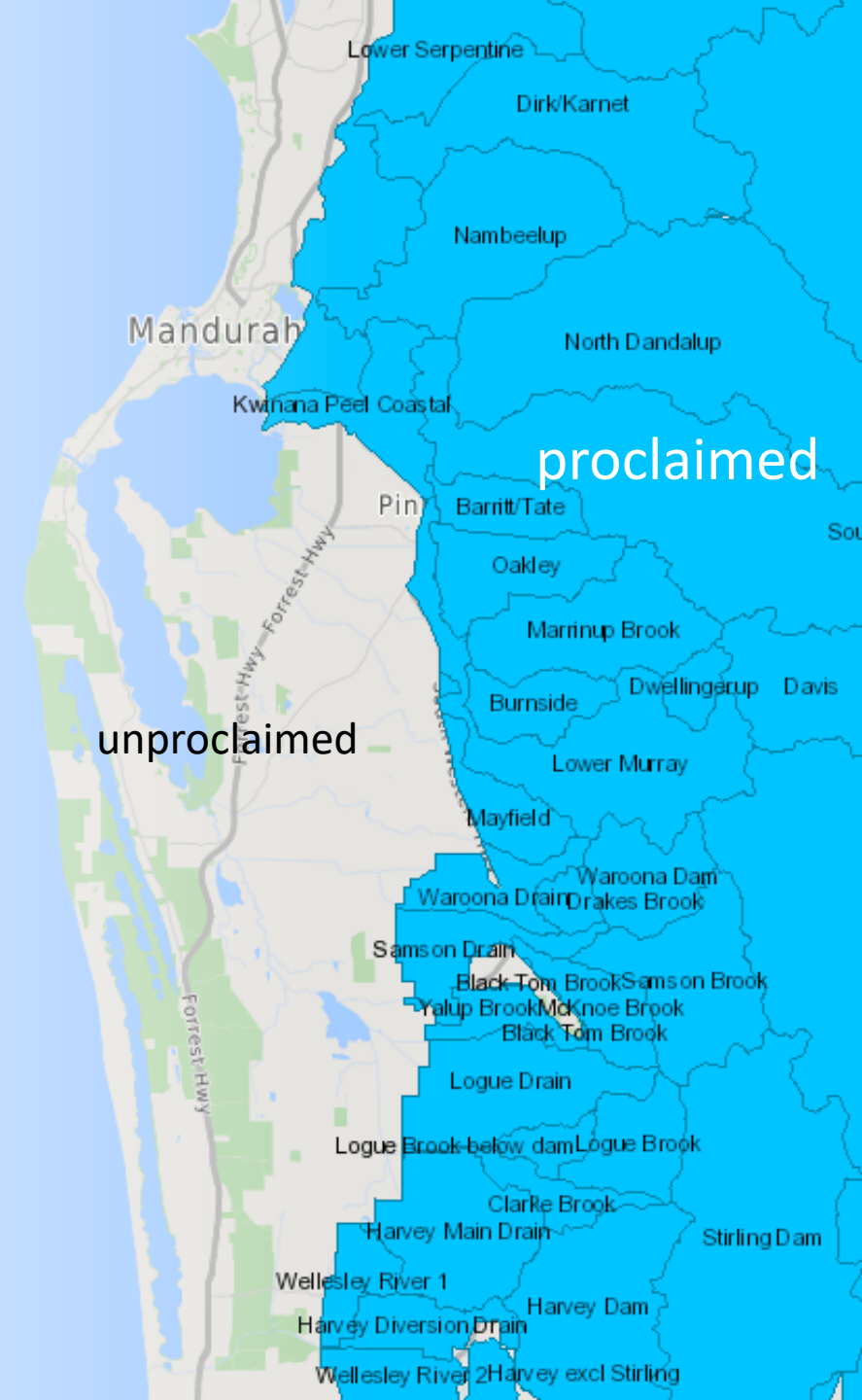
Water for
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Proclamation

- Proclamation required to licence water take
- General rule, no proclamation = no allocation plan
- Unproclaimed surface water catchments on coastal plain a legacy of focus on scarp dams
- Interest in surface water on coastal plain
- DWER renewed desire to proclaim
- RiWI is restrictive – new Bill more efficient
- New surface water allocation plans?





Environmental Impact Assessment

- EIA in the absence of proclamation and surface water allocation plans
- EPBC & EP Act unlikely to be triggered
- Socio-political and moral drivers for proponents to do the right thing
- Environmental water policy underpins EIA (what about EPA guidance?)
- Arris report and DWER response – a framework

Lobbying the tables have turned

- 43,000 submissions
- 20,000 from eastern states cities

ABOUT HOW YOU CAN HELP THE KIMBERLEY LIFE NOWHERE ELSE ON EARTH. HELP PROTECT IT. LEARN MORE NEWS VOLUNTEER

THIS IS OUR CHANCE TO SAVE THE FITZROY RIVER

PROTECT THE MARTUWARRA FITZROY RIVER

Irrigation proposals threaten the Fitzroy, the lifeblood of the Kimberley. Help protect the Fitzroy River, add your voice to

READ THE PETITION

WHY THE FITZROY IS SPECIAL



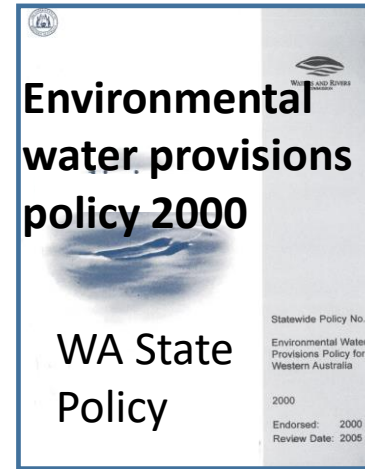
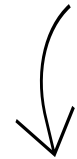
The Environmental Water narrative

Important because environmental water isn't explicitly statutorily protected under RiWI (except where required on a water licence)

Should be under the new Bill

NATIONAL PRINCIPLES

For The Provision Of Water For Ecosystems
1996

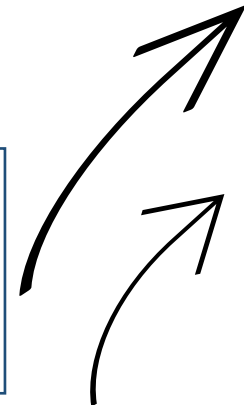
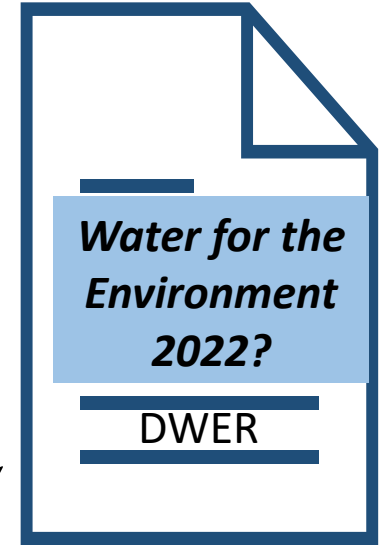


National Water Initiative
COAG 2004



The Brisbane Declaration and Global Action Agenda on Environmental Flows (2018)

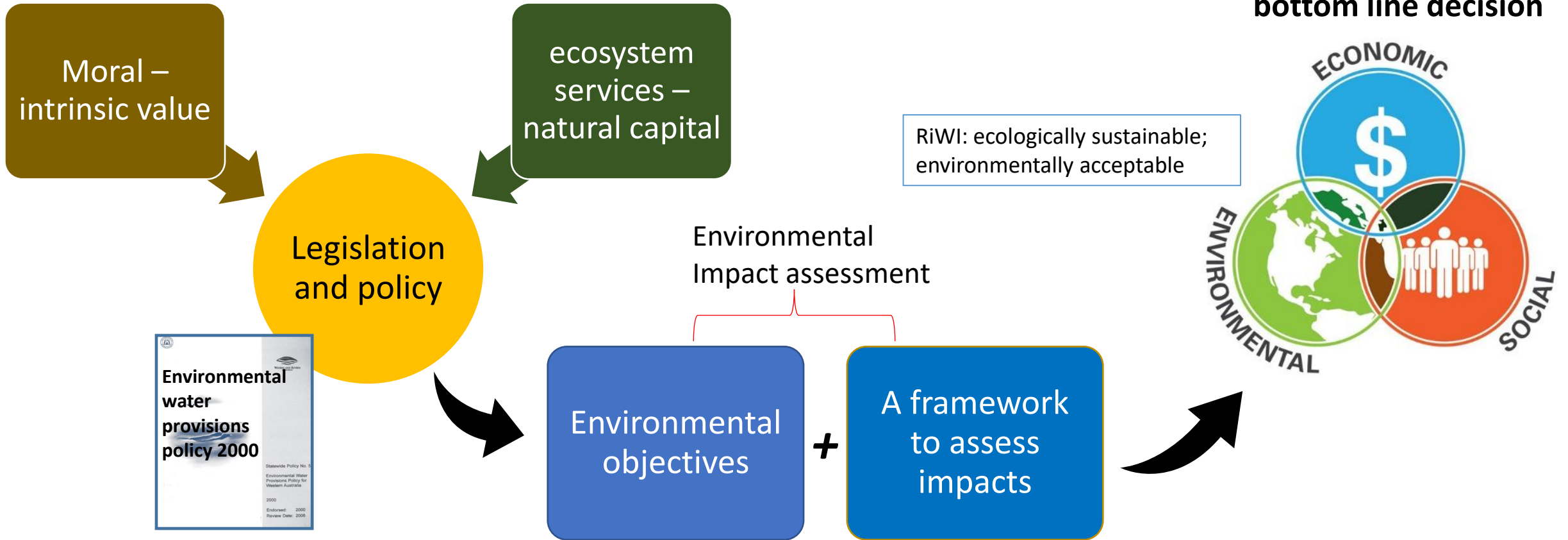
Angela H. Arthington^{1}, Anik Bhaduri², Stuart E. Bunn¹, Sue E. Jackson¹, Rebecca E. Tharme^{1,2,3}, Dave Tickner⁴, Bill Young⁵, Mike Acreman⁶, Natalie Baker⁷, Samantha Capon¹, Avril C. Horne⁸, Eloise Kendy⁹, Michael E. McClain^{10,11}, N. LeRoy Poff^{12,13}, Brian D. Richter¹⁴ and Selina Ward¹⁵*



Updated NWI



The Environmental Water framework





Environmental Water Policy review – outcomes focussed

- Non stationarity (groundwater & surface water systems) – climate change – non greenfields
- Complex setting for environmental water
- Outcomes must be clear – fitting with regulatory movement to outcome based condition setting

Outcomes for water-dependent ecosystems (and their dependent values):

- Preserve, or
- Restore, or
- Support adaption

Ecological Water Requirements, water regimes to maintain ecosystems at a low level of risk.

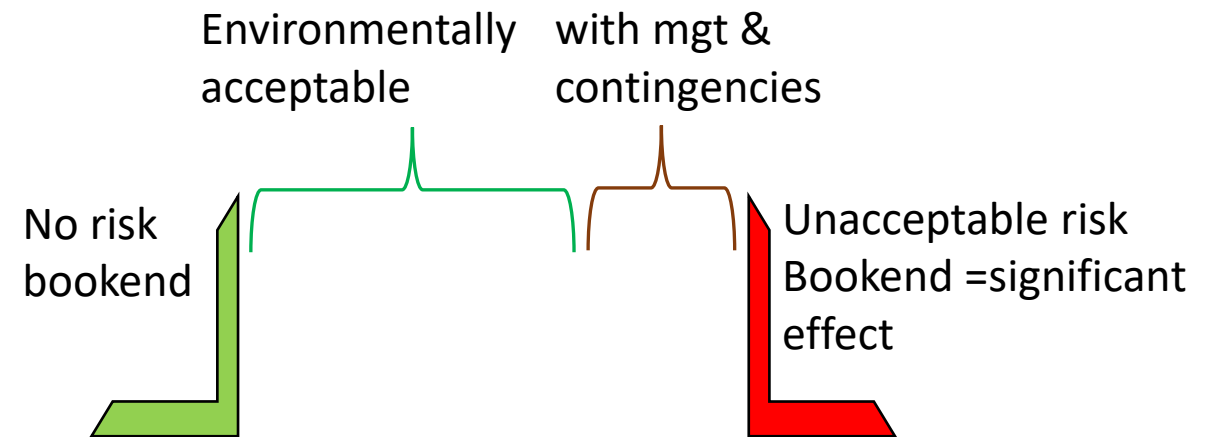
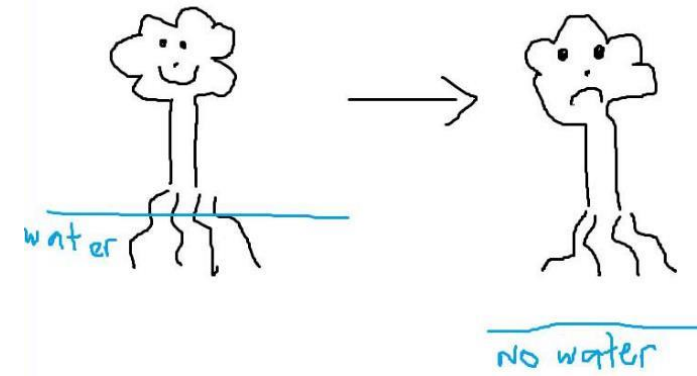
How does this definition sit in this new policy paradigm?

What are we really asking for when wanting an EWR?



Ecological Water Requirements

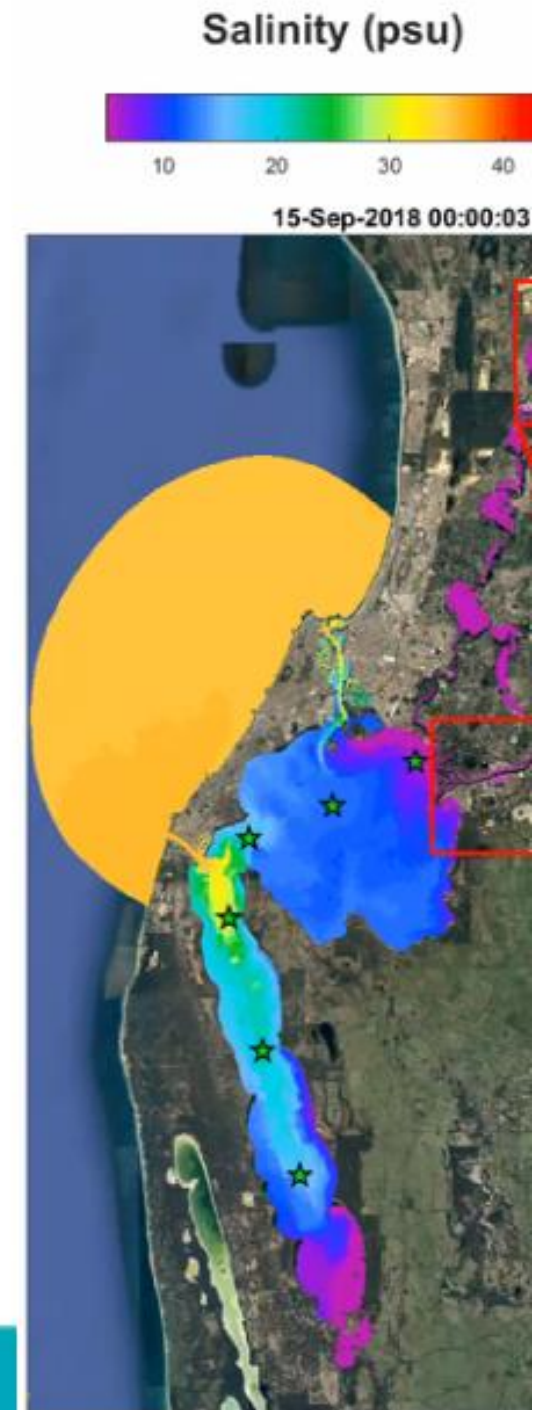
- Ecological water requirements underpin EIA
- Spectrum of EWRs (often hypothesis testing)
- Non-stationarity: dynamic EWRs
- Expert panel approach suited to complex EWR environments
- Align with other frameworks eg ecological character descriptions-limits of acceptable change





Assessing impacts to the estuary

- Estuary model – decision support tool
- Projection of future states
- EIA of surface water take proposals
- Expert panel - EWRs
- Nutrients vs freshwater?
- Seagrasses and salinity key criteria?
- Arris report response





Assessing impacts to rivers

- Arris report response – proposals to take surface water
- Values assessment
- EWRs = environmental flow assessment
- Intrinsically linked to the estuary as a key receptor

Competition for unregulated surface water

- Work with parties to articulate expectations for investigations, assessment and management
- Interested parties encouraged to collaborate



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Department of **Water and Environmental Regulation**

Thank You



What is environmentally acceptable?

EPA's *Environmental Impact Assessment administrative procedures* - reduce environmental impacts to an acceptable level.

The Rights in Water and Irrigation Act 1914 the take and use of water is 'environmentally acceptable' when deciding whether to grant or refuse a water licence.



Environmentally acceptable impacts, how do you define them?



Manage water to maintain the values for which the site is recognised

Some examples:

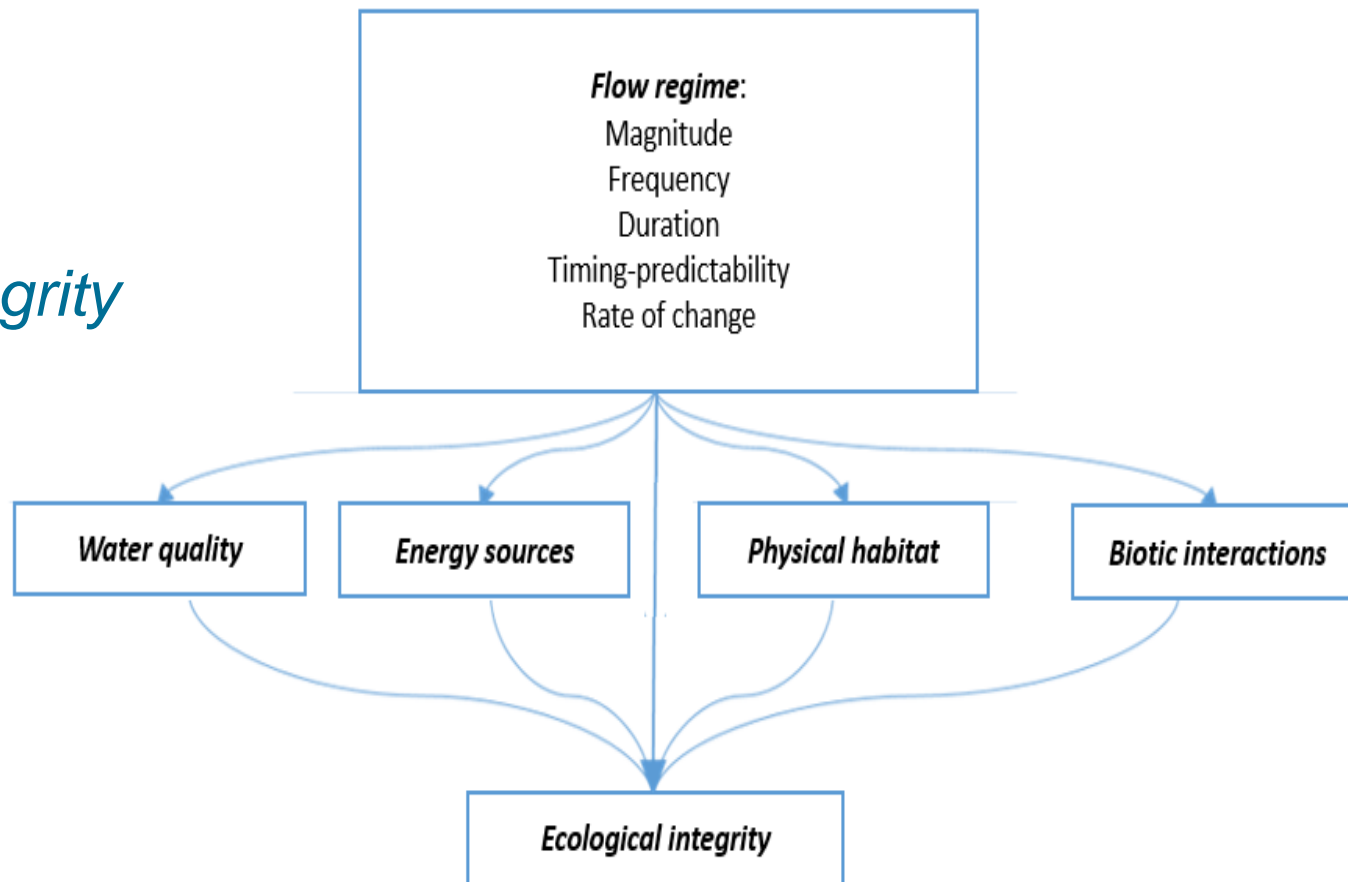
- Surface water regime wetlands
- Ecological character descriptions eg Ramsar
- Heritage site values
- Social values – e.g. good quality water to swim



The principle of the conservation of biological diversity and ecological integrity

Principle is common to:

- *EP Act 1986,*
- *EPBC Act 1999*
- *Biodiversity Conservation Act 2016.*



The key components of a river system that maintain ecological integrity (adapted from Poff et al. 1997)



Challenges of mapping GDE

- 16 groundwater plans
- 6 surface water plans
- Plans in the North-West are regional in scale

