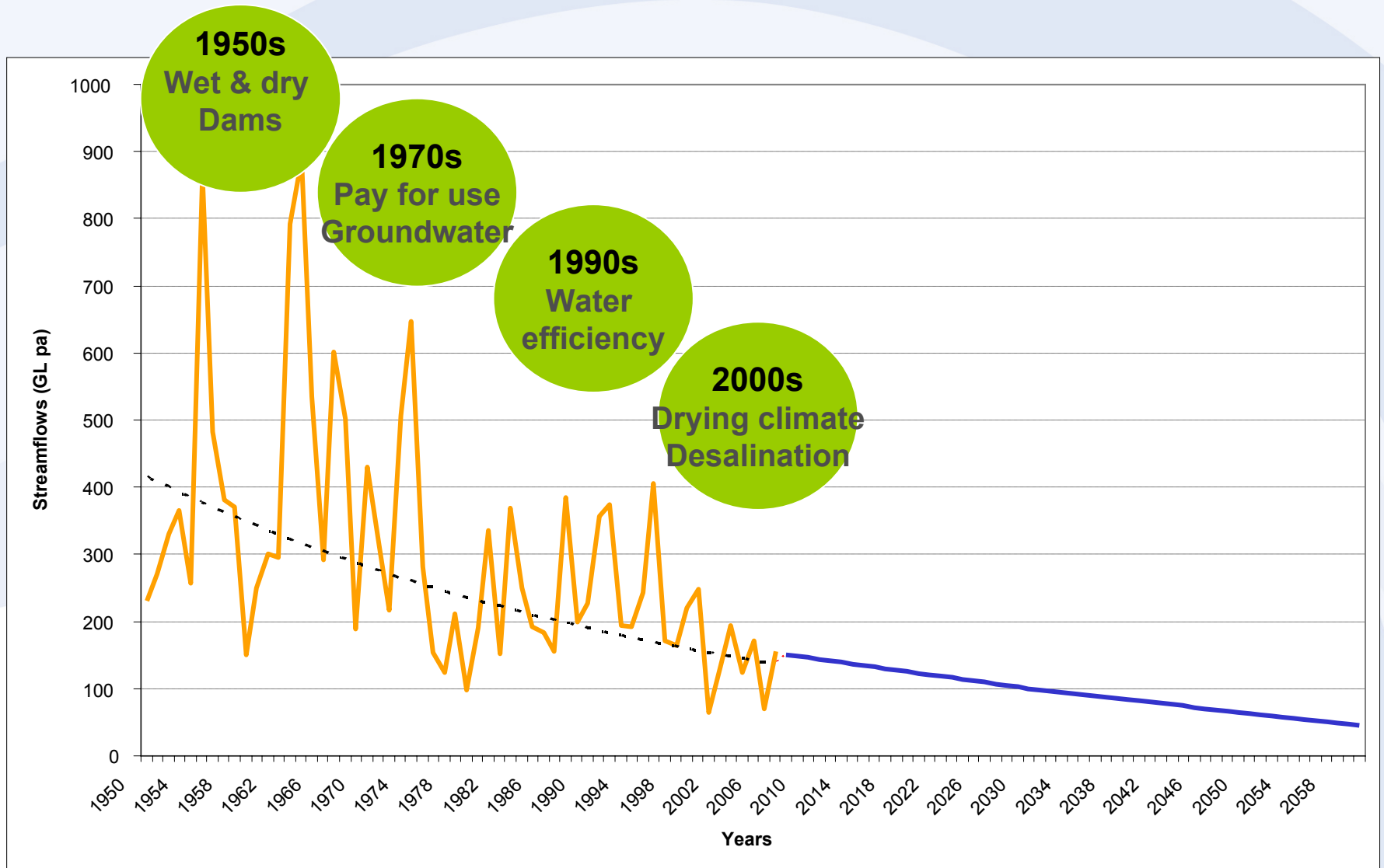


Desalination – the WA experience

Presentation to
Committee for Economic
Development of Australia

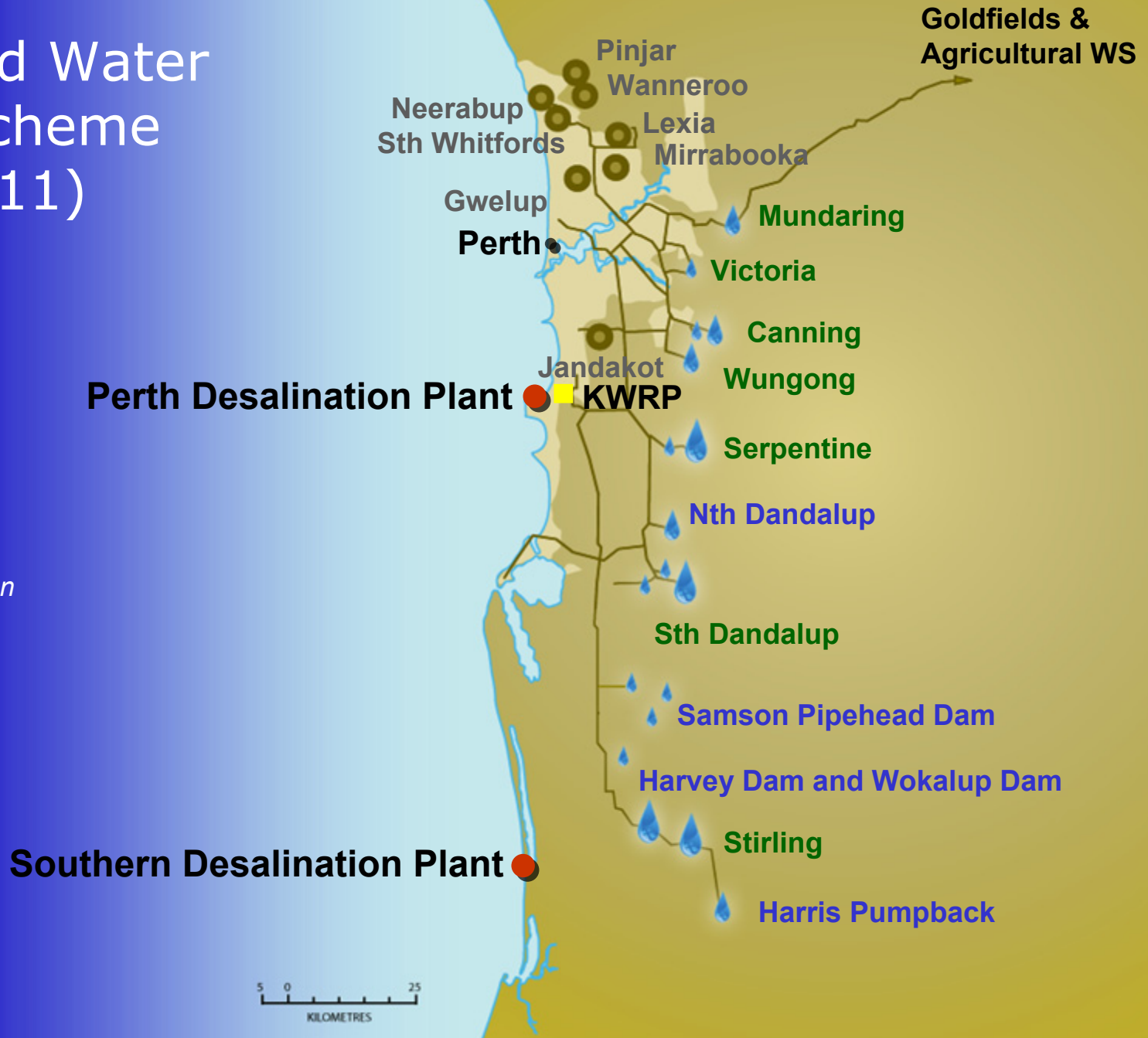


An even drier climate

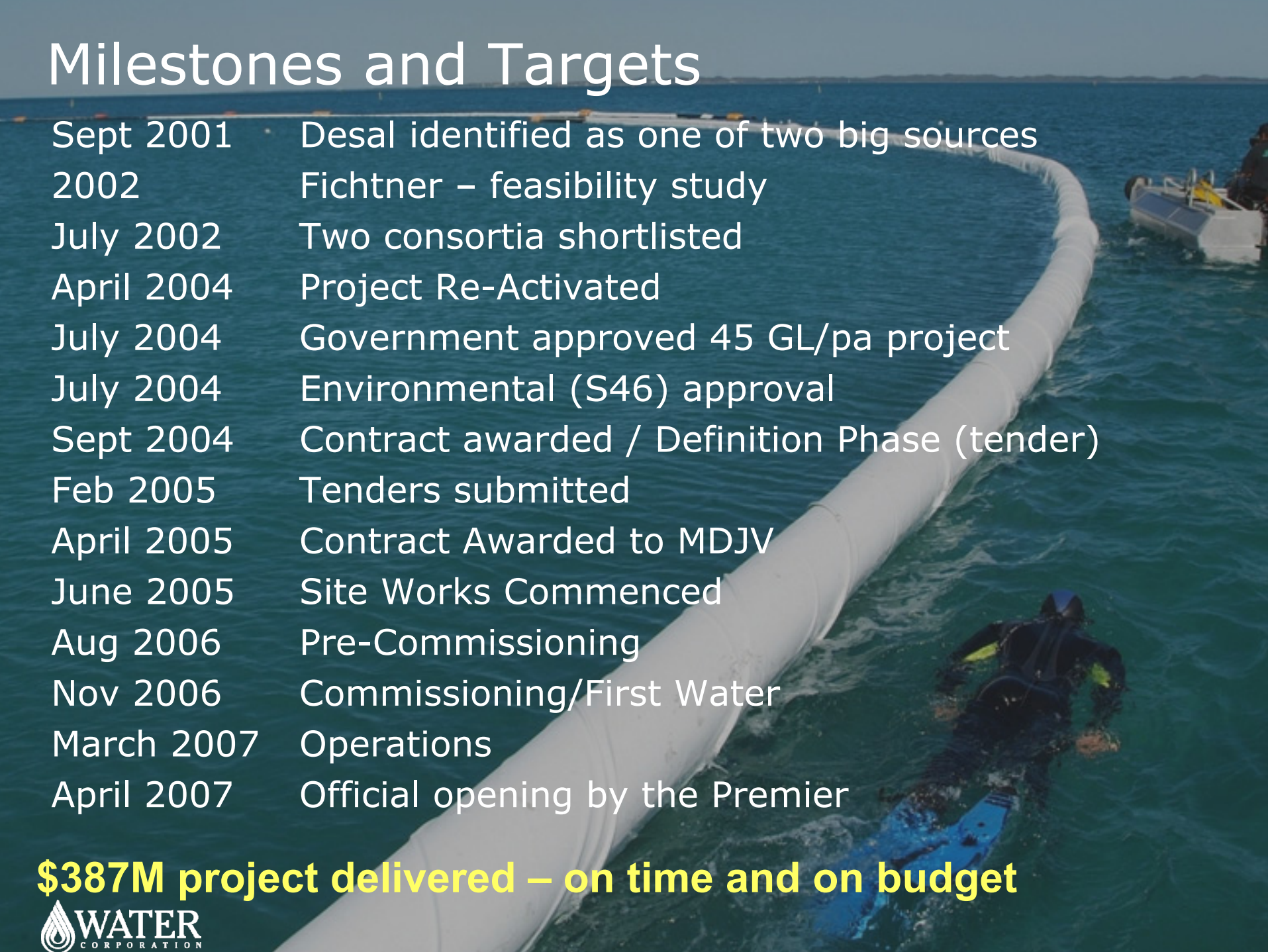


Integrated Water Supply Scheme (up to 2011)

Indian ocean



Milestones and Targets



Sept 2001	Desal identified as one of two big sources
2002	Fichtner – feasibility study
July 2002	Two consortia shortlisted
April 2004	Project Re-Activated
July 2004	Government approved 45 GL/ya project
July 2004	Environmental (S46) approval
Sept 2004	Contract awarded / Definition Phase (tender)
Feb 2005	Tenders submitted
April 2005	Contract Awarded to MDJV
June 2005	Site Works Commenced
Aug 2006	Pre-Commissioning
Nov 2006	Commissioning/First Water
March 2007	Operations
April 2007	Official opening by the Premier

\$387M project delivered – on time and on budget

June 2005 – Construction of the
plant commences











Perth Seawater Desalination Plant
completed – March 2007

Environmental considerations

- Energy requirements are purchased from wind farm
- Plant located in existing industrial site – minimal visual or noise pollution
- Ocean outlet buried with a diffuser for dilution - no restrictions on fishing or boating
- Salt discharge – salt content of mixed water will drop to 3.8% within 50 metres of the nozzles - normal sea water 3.7% of salt)
- Working closely with environmental regulators



Environmental Approvals / Monitoring





Yarragadee axed

South West celebrates Government backpedal over aquifer plans

Protected species at new desal plant site

AMANDA BANKS

Four vulnerable and protected species could have their natural habitats disturbed by clearing vegetation to make way for the State's second desalination plant on the South-West coast.

under plans which may include relocating some. But Dr Thomas said strategies needed to be put in place before the Government committed to the site. "My concern is the Government has said this project is going ahead and it will be built here," he said. "They need to be saying this will go ahead on the

Yarragadee warning

City councillors fear desal plant the first step to aquifer

GARY KLEYN

BUNBURY city councillors fear a desalination plant at Binningup could be the first step in the State Government tapping the Yarragadee aquifer for use in Perth.

"I will not entertain any manoeuvre or anything that reeks of a manoeuvre on the Yarragadee." Cr Warren Lambert said the South West had no water shortages so there

ment officer Ben Deeley said there was concern that being connected to the integrated system would increase water prices in the South West to reflect the cost of the desalination process.



Close watch needed on water plan

Fauna danger fear

Jaime Mulrhead, Bunbury

The Water Corporation's proposal for a desalination plant to be built in Binningup from December next year could disturb several threatened animal species.

Public has right to know facts

WHEN is the Government going to be upfront with the public and tell it like it is?

The truth regarding water would be an excellent place to start, as we are told to cut back because of a lack of rain and the crisis with our dams.

Council expresses desal plant concerns

HARVEY Shire Council this week formally expressed its concerns with plans to develop a desalination plant in the beachside hamlet of Binningup.

At the council meeting on Tuesday night, the council voted in favour of a recommendation from the council's chief executive officer Michael Parker to inform the State Government of its concerns.

councillors was a call to ensure that both the Kemerton and Binningup proposals first undergo a comprehensive environmental impact study.

Speaking to the *South West* following the meeting Francis Burgoyne said he was convinced of the need for the desalination plant at Binningup compared with placing it in Kemerton.

Fears desal could threaten animals

Southern Seawater Desalination Plant

- 50 GL per year plant / expandable to 100 GL per year
 - Marine for 100GL
 - Seawater Pump Station sized for 100GL
 - Pipelines to Pre-treatment for 100GL
- Approx 30km pipeline
- 80% in road reserves
- SSWA led by two spanish companies Tecnicas Reunidas and Valoriza Agua



Engaging with the community



Benefits of Seawater desalination over conventional water sources

- **Rainfall independent**
 - zero evaporation or siltation
- **Drinking water quality**
 - not affected by bush fires, first rains, catchments
- **Can be located close to demand**
- **Environmental issues can be managed**
 - manage brine discharges, residuals
 - use of renewable energy
- **Can be built in relatively short timeframe**
 - subject to environmental approvals
- **Technological innovation potential**
 - membranes, materials and energy reduction

Thinking 50 years ahead

