



Best Practices Around the World Australia's Drought Resilience

**Public Works Commission
June 9, 2022**



Presentation Outline

- **Australia's Millennium Drought**
- **Supply vs Demand Planning**
- **BH Water Resiliency**
- **Lessons Learned**
- **Discussion**





Australia's Millennium Drought

- Period: 1997-2012
- State and territory government were required to:
 - Allocate water to the environment.
 - Include environmental costs in the water prices.
 - Effectively implement water quality management strategies.





Supply vs Demand Planning

Supply-side

- **Supply-side infrastructure**
 - Recycling
 - Desalination
 - Transfer



Demand-side

- **Demand-side Policies**
 - Rebates
 - Restrictions
 - Residential
 - Non-Residential





Supply vs Demand Planning

Pros/Cons	Supply-side	Demand-side
Pros	<ul style="list-style-type: none">• Increases storage capacity• Maintains water supply to meet demand	<ul style="list-style-type: none">• Fosters fairness, collaboration, and support for local programs• Produces significant water savings• Slows rate of depletion in dams
Cons	<ul style="list-style-type: none">• Incurs high infrastructure and energy costs• Results in significant environmental degradation• Leads to stranded assets post drought	<ul style="list-style-type: none">• Inconveniences consumers• Reduces demand decreases utility revenue



BH Water Resiliency





Lessons Learned

Lessons Learned

Incorporate both supply-side and demand-side planning options.

Implement powerful demand-side programs.

Explore modular, scalable, diverse, and innovative technology options.





Lessons Learned

Lessons Learned

Communicate clear and credible information about drought situations.

Utilize good data, robust monitoring, and evaluation for drought resilience planning.

Implement water pricing mechanisms.





Discussion