

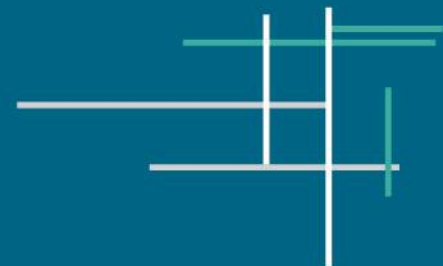


Government of **Western Australia**  
Department of **Water and Environmental Regulation**

# Water Availability in the Midwest

Darryl Abbott

Regional Manager - Midwest Gascoyne





# Water availability depends on;

- Volume
- Quality needs
- Timing
- How demand is structured - instant vs annual supply
- Infrastructure and energy constraints
  - Depth
  - Salinity
  - Borefield size
  - Transport pipelines
- Supply security expectations
- Management intensity (low vs high)



# Regional Water Sources

- Groundwater
- Surface Water
- Rainfall harvesting
- Seawater/saline groundwater
- Wastewater (industrial and public)
- Industrial supplies



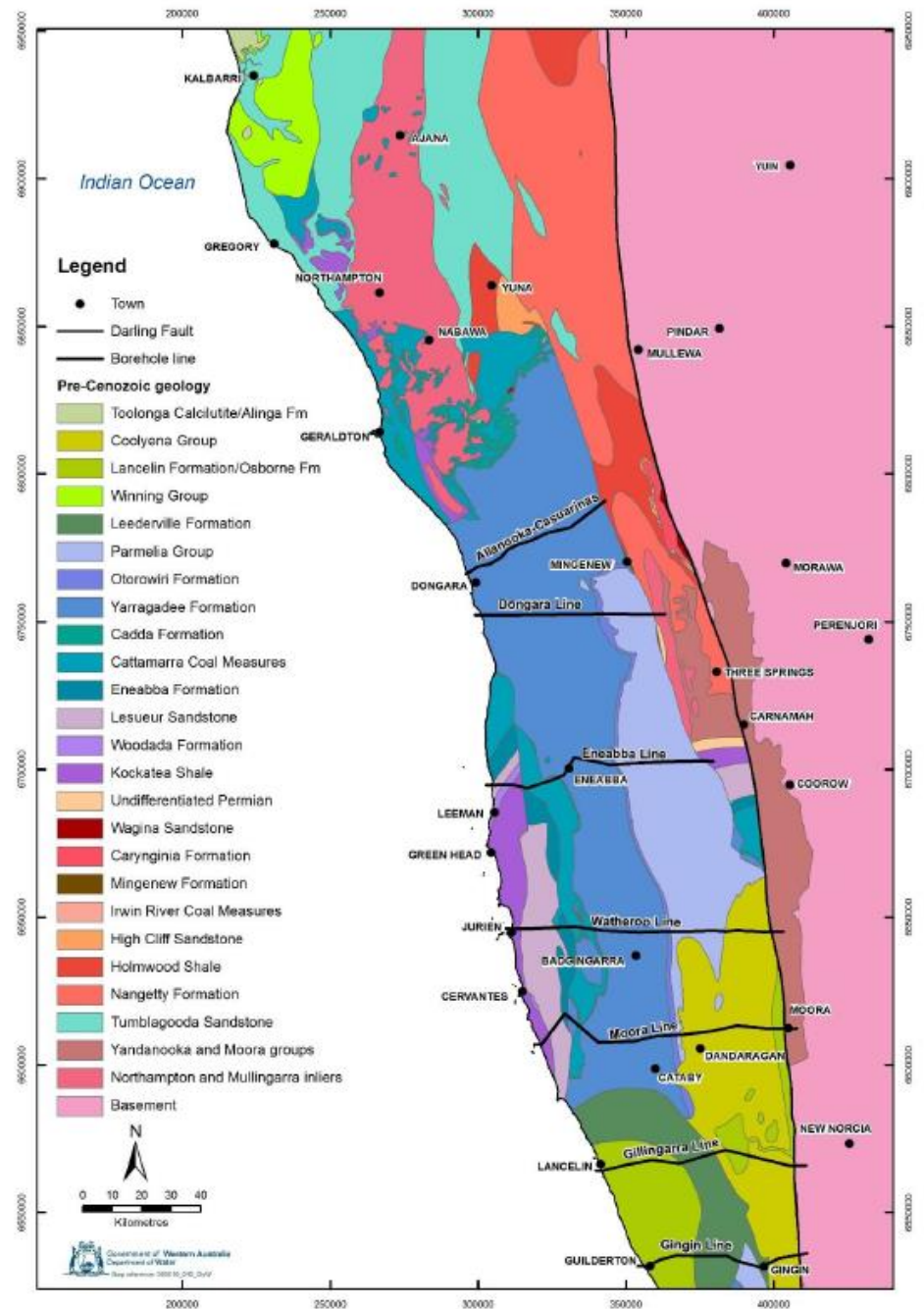


# Groundwater options



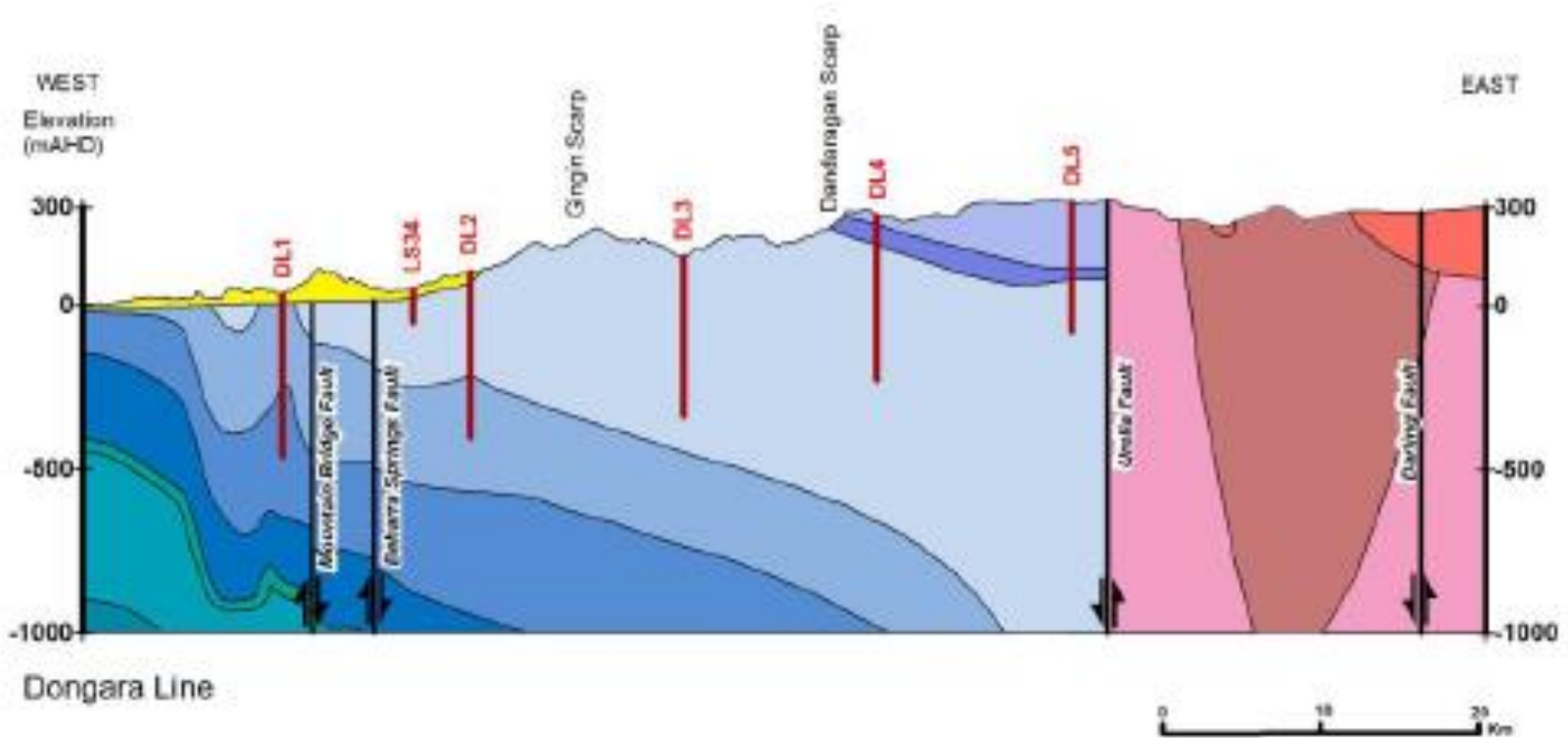


# Regional Aquifers





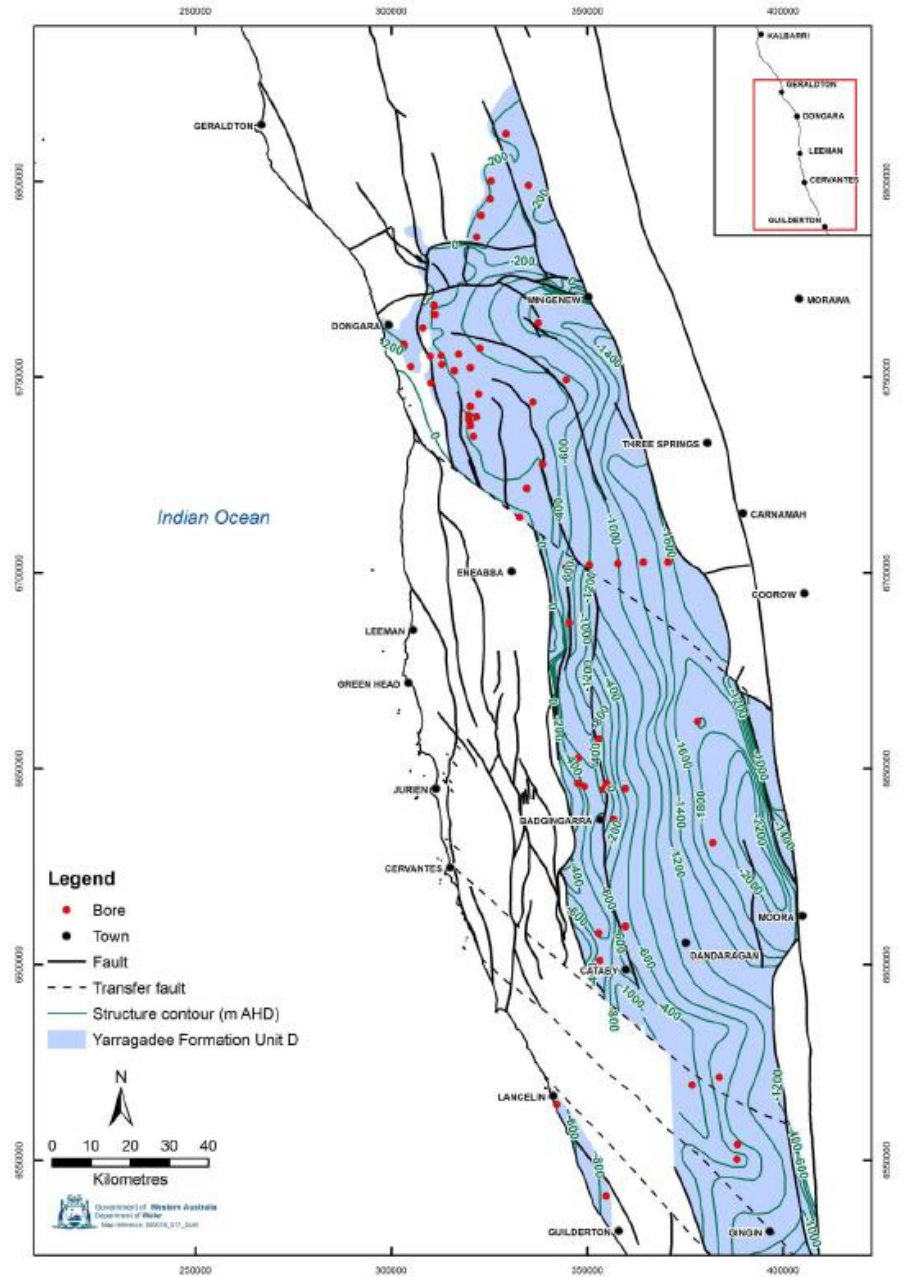
# Regional Aquifers (cont)





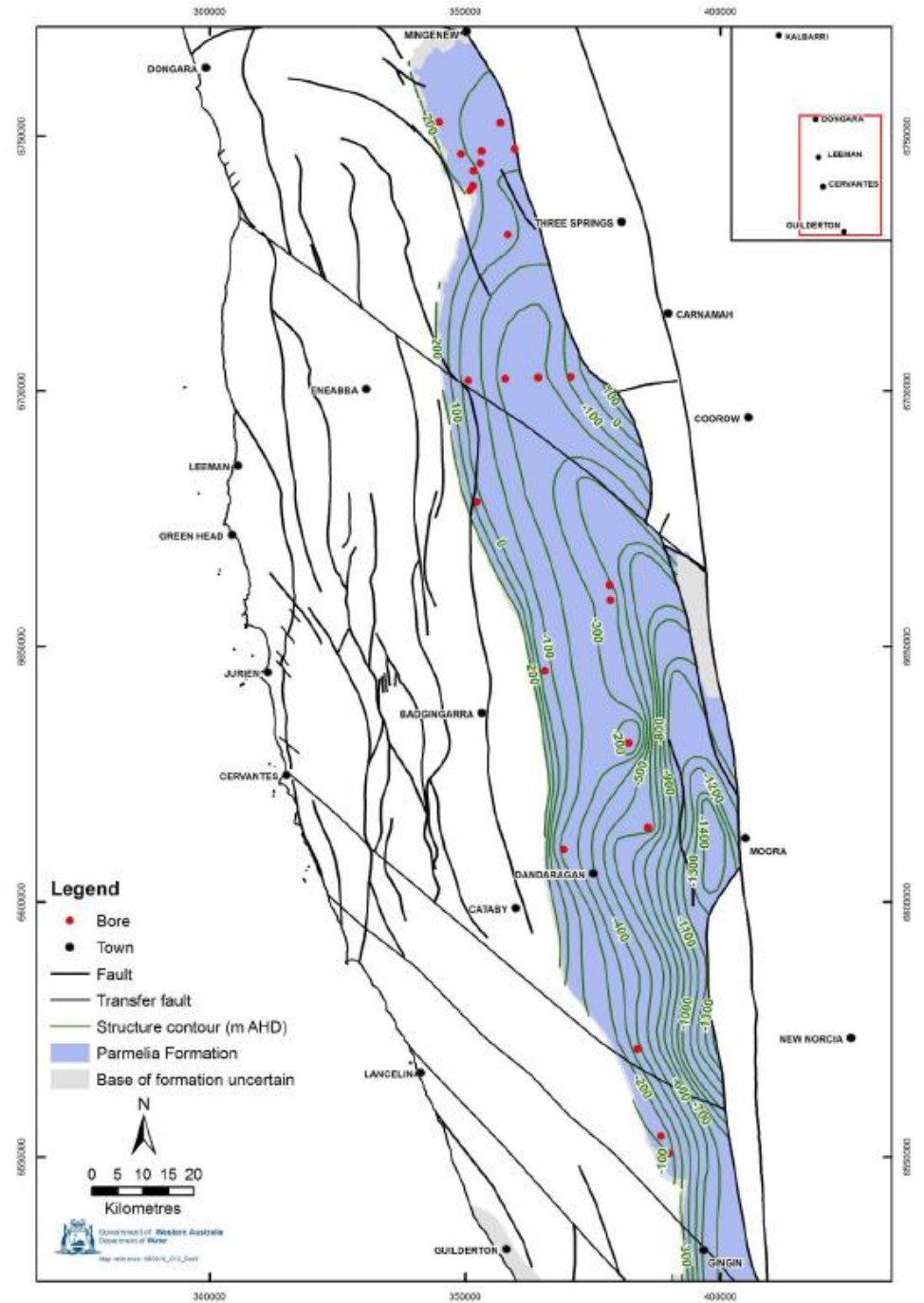


# Yarragadee Aquifer





# Parmelia Aquifer







Subarea	Aquifer	Allocation limit (GL/a)	Currently available (GL/a)	Summary
<b>Arrowsmith groundwater area</b>				
Allanooka	Yarragadee	28.8	Under review	High Yielding, fresh to brackish. High competition
Dongara	Superficial	7.2	2.6	Low yielding not be suitable for high daily supply
	Yarragadee	4.5	3.3	High Yielding, fresh to brackish.
Eneabba Plains	Superficial	14.6	>12	Low yielding ; marginal to brackish water quality.
	Yarragadee	22.5	4.9	High Yielding, fresh to brackish. High competition
Twin Hills	Parmelia	3.5	3.3	High Yielding, fresh. High competition
	Yarragadee	48.8	> 24	High Yielding, fresh to brackish.
Mingenew	Parmelia	8.2	0	High Yielding, fresh. High competition.
	Yarragadee	not set		High Yielding, brackish. Deep
Tathra	Parmelia	33.4	14	High Yielding, fresh.
	Yarragadee	0.7	0.7	High Yielding, brackish. Deep
<b>Gascoyne groundwater area</b>				
Casuarinas	Yarragadee	10	9.80	High Yielding, brackish. Deep



# Opportunities for high volume high security supplies

- Seawater
- Industrial supply
- Yarragadee aquifer





# Licensing water

- Assessed for;
  - Need, ability to access and financial capacity
  - Impacts on environment and other users
  - In the public interest
- First in First Served
- Linked to land access
- Integrates with other approvals processes

