Restoring vegetation communities

Andrew Greenfield
Program Manager – TLM Hattah
Mallee Catchment Management Authority
Effects of regulation
Monitoring vegetation response

- 3 flood return frequencies
- 6 sites in each return frequency
- Four 15m x 1m x 1m cells

**Lower floodplain**
CTF 35 000 – 60 000 ML.day\(^{-1}\)

**Mid floodplain**
CTF 60 001 – 100 000 ML.day\(^{-1}\)

**Higher floodplain**
CTF > 100 001 ML.day\(^{-1}\)
Often flooded

- **Tdr**: Terrestrial species that typically occur in dry habitats.
- **Tda**: Terrestrial species that typically occur in damp habitats.
- **Atw**: Amphibious, fluctuation-tolerant, emergent plants which are woody (trees and shrubs that tolerate wetting and drying).
- **A**: Amphibious species (plants that tolerate both flooding and drying).
- **F**: Aquatic floating, unattached species (established plants do not tolerate drying).
- **S**: Aquatic submerged species (established plants do not tolerate drying).

**Survey period**:
- 2007-08
- 2008-09
- 2009-10
- 2010-11
- 2011-12
- 2012-13
- 2013-14
- 2014-15
- 2015-16
- 2016-17
- 2017-18
- 2018-19
Sometimes flooded

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Rarely flooded

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- **A**: Amphibious species (plants that tolerate both flooding and drying).
- **F**: Aquatic floating, unattached species (established plants do not tolerate drying).
- **S**: Aquatic submerged species (established plants do not tolerate drying).
In summary

• The often inundated sites show an increasing trend towards water responsive species, with a decrease in drought tolerant species.
• The sometime flooded areas show a similar trend with decreasing drought tolerant species.
• The seldom flooded areas are still dominated by drought tolerant species, with responses of terrestrial dry species linked to large inundation events.