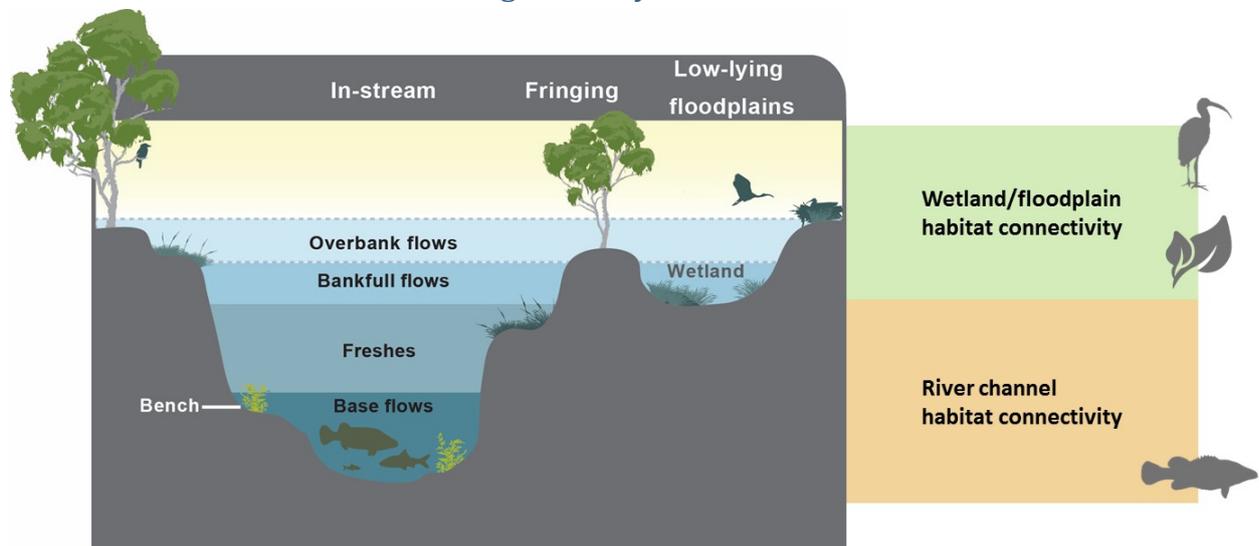


## Border–Rivers

### How much water recovery is being looked at?

- Baseline diversion limit (excluding interceptions), or how much water was available for consumptive use as at 2009, is 242.1 GL for the Queensland Border rivers and 207.6 GL for the New South Wales Border Rivers.
- Current Basin Plan legislation has a local water recovery target of 8 GL in the Queensland Border Rivers and 7 GL for the New South Wales Border Rivers This is a 3% reduction in the consumptive pool.
- Current Basin Plan legislation also has a shared water recovery target of 143 GL across catchments of the North to meet the needs of the Barwon–Darling system. This includes a contribution from the Queensland and NSW Border Rivers.
- An estimate of 15 GL (QLD) and 3 GL (NSW) has been recovered as at December 2015, which was used in the modelling as a standard point-in-time estimate. This is not necessarily where water recovery is at now.
- **The Northern Basin Review is looking at a range of water recovery scenarios. These range from no further water recovery in the Border Rivers, up to 10 GL in QLD and 15 GL of additional contribution to the local and shared recovery.**

### What flow indicators are we using and why?



### River channel indicators:

- Three fresh flows — to connect habitats along the river and stimulate fish to breed and move. Freshes help provide more habitat, by inundating different parts of the river channel, and different types of habitat, for fish and other aquatic animals. These flows increase river channel connectivity, allowing movement up and down the catchment of fish as well as transport of sediment, nutrients and carbon.

# Northern Basin Review

Key environmental outcomes



- There has been analysis of larger flows to inundate anabranches and wetlands. This suggested that these types of flows are not significantly modified by water resource development and MDBA has not set flow indicators for wetland and floodplain connectivity in the Border Rivers.

Why?	Where in the landscape?	Stream gauge	Size of flow	Duration (days)	Timing	How often? (percentage of years)
<b>River channel</b> <ul style="list-style-type: none"> <li>• Movement between habitats</li> <li>• Successful fish breeding</li> <li>• Inundate benches and snags (habitat diversity)</li> <li>• Primary production supporting the food web</li> <li>• Connectivity through the river system</li> </ul> 	Fresh	Barwon River at Mungindi	4,000 ML/d	5 days	Oct-Dec	23-31
	Fresh	Barwon River at Mungindi	4,000 ML/d	5 days	Oct-March	44-59
	Fresh	Barwon River at Mungindi	Two events of 4,000 ML/d	11 days	Jul-Jun	25-34

## What are the Border Rivers environmental results?

- We are able to achieve 1 of 3 indicators in two of the scenarios (320b and 350 scenarios). This indicator provides a flow, between October and December, during the main fish spawning season. All scenarios other than current recovery are within 1 year of meeting the target. The differences between these scenarios is not considered significant, and all scenarios provide improved flow conditions for fish breeding.
- If there was no more water recovery, none of the indicators would be met in the Border Rivers and the level of environmental improvement is expected to be minor. This would limit improvements in outcomes for fish, and would reduce downstream environmental benefits.
- Continuing with water recovery will improve in-channel environmental outcomes by increasing the frequency of flows to provide more opportunities for fish to breed and move. It would also assist with wetting different habitats and increase the productivity of the river.
- We are confident that continuing with some water recovery beyond the current recovery will provide good environmental outcomes for the Border Rivers and for the downstream Barwon–Darling river system.