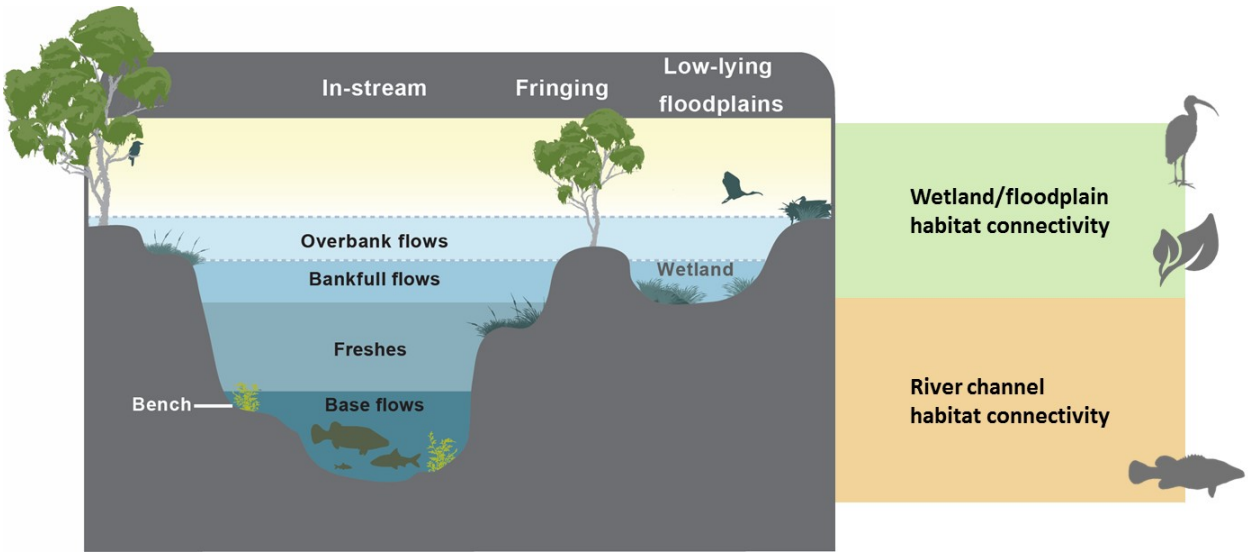
Namoi

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 343.3 GL.
- Current Basin Plan legislation has a local water recovery target of 10 GL in the Namoi. 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 Namoi.
- An estimate of 13 GL 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 Namoi up to 15 GL of additional water recovery, including shared recovery.**

What flow indicators are we using and why?



River channel indicators:

- One base-flow – to connect habitats along the river. Base flows are important for maintaining refuge waterhole habitats during dry times. If too many refuge waterholes dry out, local extinction of fish populations could occur with much slower re-colonization upon the return of wetter conditions.

- One fresh – to connect habitats along the river and stimulate fish to breed and move. Freshes help provide more habitat, and different types of habitat for fish and other aquatic animals. Support a greater diversity of species as well as more fish.

Wetland/Floodplain indicators:

- One overbank flow indicator — to provide large enough flows for long enough to reach key flood dependent vegetation and wetlands on the floodplain to maintain their character and condition. Overbank flow are important for nutrient exchange between the river and its floodplain, supporting both aquatic and terrestrial food webs.

Why?	Where in the landscape?	Stream gauge	Size of flow	Duration (days)	Timing	How often? (percentage of years)
Wetland/floodplain • Water wetlands, lagoons, anabranches and floodplain woodlands • Maintain important wetland vegetation • Increase food resources – exchange nutrients between river channels and floodplain • Inundate fringing vegetation, especially river cooba and red gum • Floodplain productivity (grasslands)	Wetlands, anabranches and floodplain	Bugilbone	4,000 ML/d	45 with minimum duration of 7 consecutive days	Jul-Jun	22-25
River channel • Movement between habitats • Successful fish breeding • Inundate benches and snags (habitat diversity) • Primary production supporting the food web • Connectivity through the river system • Maintenance of waterhole habitats • Breaks up extended dry spells	Base flow	Bugilbone	500 ML/d	75 with minimum duration of 25 consecutive days	Jul-Jun	41-55
	Fresh	Bugilbone	1,800 ML/d	60 with minimum duration of 6 consecutive days	Jul-Jun	29-39

What are the Namoi environmental results?

- Water recovery in the Namoi is well underway.
- In most water recovery scenarios we achieve 3 out of the 3 flow indicators.
- The exception is the 278 GL scenario, water recovery as at December 2015, where only the fresh indicator is met. The base-flow and wetland/floodplain indicators are not met by December 2015 levels of water recovery.
- Continuing with water recovery will have benefits in getting water into wetlands and anabranches, and connecting the river with its floodplain more regularly. It will also assist with flows to link and freshen waterhole habitats during dry times to protect refuge pools and fish that depend on them.
- We are confident that continuing with some water recovery will result in good environmental outcomes for the Namoi and would also contribute to better outcomes further downstream in the Barwon–Darling.