Managing floodplain harvesting in the Intersecting Streams water resource plan area

New floodplain harvesting entitlements will not be issued for Intersecting Streams. Floodplain harvesting was included in the calculation of entitlement volumes during the conversion process of existing area-based licences to volume-based licenses in 2000. Growth in use will be managed using existing mechanisms of the water management framework and Basin Plan limits.

Accounting for floodplain harvesting in NSW water sharing plans

Water sharing plans (WSPs) set the level of overall extractions within water sources in NSW under the Water Management Act 2000. The Intersecting Streams water sharing plan defines the plan extraction limit as:

1. The estimated annual extraction of water averaged over the period from July 1993 to June 1999 under entitlements issued under Part 2 of the Water Act 1912 in the respective water source, plus
2. the estimated annual water requirements pursuant to domestic and stock rights and native title rights in the respective water source at the commencement of this Plan, plus
3. the estimated annual extraction of water averaged over the period from July 1993 to July 1999 by floodplain harvesting activities for which floodplain harvesting access licences were later issued in the respective water source (this is currently estimated as zero).

Determining floodplain harvesting entitlement

In the Intersecting Streams water sources, the harvest of floodplain water is counted against existing access licences. These volumes also contribute to the extraction total for the region, assessed against the long term annual average extraction limit (LTAAEL).

In 2000, area-based licenses were converted to volumetric licences using a method designed to reflect their historical water usage. Historical water demand was calculated using area planted, and water needed to meet crop water requirements. Water use included all forms of water, both water recorded by a meter and unmetered sources that were quantified using other estimating techniques. The method used to calculate volumetric entitlements in Intersecting Streams used information collected by farm surveys of irrigated areas and crop types planted:

- The total area used to calculate the new volume-based entitlement cannot exceed the area specified in the previous licence. If the reported total area irrigated was more than the area authorised by the licence, the total was adjusted back to the authorised area. The volumetric conversion was only applied up to the authorised area.
- Planted areas were combined with averaged application rates to calculate total irrigation water volumes. The planted area for each crop type was multiplied by a climate appropriate crop factor to calculate the total volume of water required in megalitres. Note: a perennial rate was applied where crops were over-sown on the same area.
- Areas in the allowable irrigated area that did not have a history of crops being planted still received a volumetric allowance. If the total reported area in a year was less than the authorised area, the inactive area was multiplied by an irrigation rate calculated for inactive area and the climate zone. The volume is expressed in megalitres.
- The total annual volume is all the volumes calculated for the cropped and inactive irrigated areas.

1 Taken from: Volumetric Conversion – the next stage. A booklet for landholders with licences on unregulated rivers in NSW, DLWC, September 2000.
The above method means that all water used, including floodplain harvesting extraction, is represented in the calculation of issued access licence share components and unregulated river LTAAELs. The method differs from some other valleys, which only use recorded diversions (i.e. excluding unmeasured diversions), so floodplain harvesting diversions were outside the water management framework. They needed new entitlements to capture this form of take in the management system and incorporate them into calculating various limits such as Cap and LTAAEL.

**Managing growth in floodplain harvesting**

The existing access licence share components and the LTAAEL calculation includes floodplain harvesting extractions for the Intersecting Streams. Therefore, managing growth in floodplain harvesting uses existing legislative mechanisms.

When an assessment of the average annual extraction limit (averaged over the preceding five water years) is found to have exceeded the LTAAEL by 5%, action will be taken to return average annual extractions to the LTAAEL.

Corrective action may involve the reduction of available water determinations for unregulated river access licences and unregulated river (special additional high flow) access licences. A reduced available water determination on these licences also reduces the ability to take water by floodplain harvesting as this form of take is included in those licences share components.

The current long term average estimate of diversions is 3 GL/yr. The Department of Planning, Industry and Environment may become aware of diversions (including floodplain harvesting diversions) that were occurring under Cap conditions but not incorporated in the long term average estimate. In this case, the department would provide an updated assessment to the Murray–Darling Basin Authority for technical review and acceptance as the best available information to describe pre-Basin Plan diversions.

**More information**


If you would like to stay informed about all of the department's upcoming engagement activities, please visit our [website](https://www.industry.nsw.gov.au/) or subscribe to our [newsletter](https://www.industry.nsw.gov.au/).