

*Due to the disallowance of the amendments to the Water Management (General) Regulation 2018 that relate to floodplain harvesting, implementation dates for the NSW Floodplain Harvesting Policy are uncertain. The dates specified in our reports and guidelines may therefore be superseded.*



# NSW Floodplain Harvesting Policy

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# Key points of the Floodplain Harvesting Policy

- Under the *Water Management Act 2000* (WM Act), water extractions, including floodplain harvesting extractions, must be taken under an appropriate water access licence, a basic landholder right or a licence exemption. The NSW Floodplain Harvesting Policy (the policy) provides a framework for licensing floodplain harvesting extractions.
- The policy applies to all floodplain harvesting within New South Wales (NSW).
- Floodplain harvesting extractions will be managed within existing long-term average annual extraction limits. There will be no growth in overall extractions on a valley-wide basis as a result of the implementation of this policy.
- All floodplain harvesting activities will require a water supply work approval and a floodplain harvesting access licence authorised under the WM Act. When the policy commences, the Department of Industry (the department) will invite people interested in undertaking floodplain harvesting activities to submit a registration of interest.
- On 3 July 2008, the Minister for Water announced a new policy with regard to the construction of works that facilitate the harvesting of water on a floodplain.
- Only works constructed on or before 3 July 2008 in accordance with an approval or that did not require an approval, or for which a valid application under Part 2 or Part 8 of the *Water Act 1912* or the WM Act was made on or before that date, are eligible for assessment under this policy.
- Not all works that are capable of floodplain harvesting will necessarily be authorised for floodplain harvesting activities. For example, existing works for which an application was required and not made under Part 2 or Part 8 of the *Water Act 1912* on or before the 3 July 2008 cut-off date, will not be authorised for floodplain harvesting. A floodplain harvesting access licence may not be issued for the full volume that a work is capable of harvesting or historically harvested as of the 3 July 2008 cut-off. Depending on the outcomes of the assessment process, works may require modification or decommissioning.
- Implementation of this policy will take place in five stages (see section *The process of implementation* in this policy for more information on each step):
  1. registration of interest
  2. determination of eligibility
  3. issuing of work approvals to eligible works
  4. incorporating floodplain harvesting in water sharing plans
  5. issuing of floodplain harvesting access licences.
- In order to facilitate the orderly and equitable processing of registrations of interest in work approvals and floodplain harvesting access licences, the department will establish a review process to consider submissions about whether the floodplain works are eligible for assessment under this policy and about the share component of a floodplain harvesting licence as set out in preliminary determinations.
- Trading of floodplain harvesting entitlements (previously known as permanent trading) will be permitted subject to the development of an appropriate trading framework that defines the types of trades permitted and any relevant trading restrictions. Prior to any trade of floodplain harvesting entitlement being approved, the current owner of the floodplain harvesting licence (the vendor) will need to demonstrate how they will ensure that their works no longer undertake the floodplain harvesting associated with the share component to be sold.
- Trading of floodplain harvesting water allocations (previously known as temporary trading) will not be allowed initially because of the difficulties of ensuring that such trades do not cause inappropriate

impacts. These types of trades will be considered as soon as appropriate metering, monitoring, administrative and accounting processes can be put in place to facilitate such trades.

- Implementation of the policy is occurring initially in the five northern valleys where floodplain harvesting is most prevalent: the Border Rivers, Gwydir, Namoi, Barwon–Darling and Macquarie valleys.
- Implementation of the policy in these valleys revealed some issues that needed to be addressed before the policy could be rolled out in these valleys and statewide. Following a period of public consultation between March and April 2018, the policy was amended and updated accordingly. The main changes are as follows:
  - **Management of rainfall runoff**—The definition of floodplain harvesting was amended to include rainfall runoff, and to exclude used water. The implementation framework was amended to allow contaminated water to be captured even when water users have insufficient balance remaining in their floodplain harvest allocation accounts. It provided for rules to be established for when this water can be taken and how to account for it to ensure there is no overall increase in the take of water.
  - **Monitoring floodplain harvesting take**—The approach to monitoring floodplain harvesting was amended to remove the requirement for individual farms to propose their own on-farm monitoring strategies. That approach was replaced with a staged and standardised approach, with water users required to use gauge boards and calibrated storage curves during the first three years of implementation in the northern valleys, with an evaluation to occur during this time.
  - **Approach to account management rules**—The approach to account management rules was amended to provide greater flexibility in the development of these rules. The rules will now be developed on a valley-by-valley basis to ensure that individual impacts resulting from the framework are distributed as evenly as possible, and that any current growth in use is managed within the existing long-term average annual extraction limit.
  - **Editorial changes and changes reflecting better information**—The policy was amended to reflect some changes that have occurred in the water management space since 2013, including the imminent full coverage of water sharing plans across NSW and the improved information that the department now has in relation to the location and extent of floodplain harvesting works in the northern valleys.

## Purpose of and need for the policy

The purpose of this NSW Floodplain Harvesting Policy is to manage floodplain water extractions more effectively in order to protect the environment and the reliability of water supply for downstream water users, ensure compliance with the requirements of the WM Act, and meet the objectives of the National Water Initiative.

The unconstrained harvesting of water from floodplains reduces the amount of water reaching or returning to rivers. This decreases the amount of water available to meet downstream river health and wetland and floodplain needs. Floodplain harvesting can affect the connectivity between the local floodplain wetlands and the river through the loss of flow volume and the redirection of flood flows. It also erodes the reliability of water supply to downstream water users.

In order to meet the objectives of the National Water Initiative, NSW is required to account for and license the extraction of water taken by floodplain harvesting works.

The WM Act requires all water extracted from a water source in NSW to be licensed, unless that water has been taken under a basic landholder right or an applicable licence exemption.

Effective management of floodplain harvesting activities can only be achieved if there is a licensing system established that clearly articulates the access and sharing arrangements for these extractions.

# Scope of the policy

The NSW Floodplain Harvesting Policy applies to all floodplain harvesting activities in NSW, as defined in the following sections.

## Definition of a floodplain

For purposes of this policy, 'floodplain' means any area of land designated as a floodplain under the WM Act or the *Water Act 1912*. The policy applies to floodplain harvesting activities on properties where all or part of that property lies within the designated floodplain.

The policy applies to all areas of all properties, where all or part of the property lies within the designated floodplain. To remove any doubt, the policy applies to all areas of the property, irrespective of whether parts of the property are developed for irrigation or not.

There are existing floodplain designations in each of the valleys in NSW where there is significant floodplain harvesting. In some cases these designations may be adequate to implement this policy; in others they may need to be tailored to include the location of existing floodplain harvesting works. The department will assess whether changes to existing designations are needed after receiving registrations of interest in obtaining a water supply work approval and access licence for floodplain harvesting.

## Definition of floodplain harvesting

Floodplain harvesting is the collection, extraction or impoundment of water flowing across floodplains, including rainfall runoff and overbank flow, but excluding the taking of:

- water under a water access licence that is not a floodplain harvesting access licence
- water under a basic landholder right, including water taken under a harvestable right
- water under an applicable water access licence exemption under the WM Act
- used irrigation water.

## Rainfall runoff and contaminated runoff

Rainfall runoff from developed irrigation areas may contain chemical pollutants and/or elevated levels of suspended solids.

Rainfall runoff is also included in the definition of floodplain harvesting without regard to which land the rainfall runs off. This ensures all rainfall runoff is treated equally, irrespective of private decisions regarding the usage of agricultural chemicals. The explicit inclusion of rainfall runoff within the definition of floodplain harvesting ensures that the collection of rainfall runoff is adequately catered for within the licensed entitlements. This means any existing best management practices designed to limit the discharge of contaminated water off-farm can continue and be properly accounted for within existing long-term average annual extraction limits. It also provides for a robust compliance and enforcement regime that recognises that rainfall runoff is often captured and stored using the same infrastructure used to capture and store overland flow and cannot be separately monitored and audited.

## Used irrigation water

It is a common water supply work approval condition that the holder makes all reasonable efforts to prevent any used irrigation water discharging into or onto any adjoining roads or lands, or into any watercourse or aquifer. The exclusion of used water from the definition of floodplain harvesting is consistent with this common approval condition.

The exclusion of used water is also consistent with the WM Act, which makes it an offence to take water from a water source other than in accordance with an appropriate water access licence, a basic landholder right or a licence exemption. Additionally, under the WM Act water taken as part of a licence is water that is divested from the Crown and is therefore no longer owned by the state. It is not an offence under the WM Act to recycle used water on-farm.

## Floodplain harvesting and harvestable rights

Water taken under a harvestable right is not included within the definition of floodplain harvesting.

All capture of harvestable rights water must be done in accordance with any Harvestable Rights Order that is in force under the WM Act. Within most of NSW, landholders are able to construct a dam of a size that has been estimated to capture the equivalent of 10% of the average regional rainfall runoff for their respective property size. The ability to use floodplain harvesting works to exercise a harvestable right is very limited, but where it does, this will be explicitly considered in the implementation of the policy.

## Types of floodplain harvesting

Floodplain harvesting works are generally works built:

- specifically to facilitate floodplain harvesting, including pumps, structures or other works that divert water into or from storages, supply channels, depressions or otherwise impound flows
- for multiple purposes that have the effect of facilitating floodplain harvesting, such as:
  - levees, conveying works and off-river storages constructed in billabongs or depressions
  - below-ground level channels from which the water is delivered into storages
  - works that collect rainfall runoff and which deliver that water into storage.

Floodplain works that do not facilitate the collection, extraction or impoundment of water flowing across floodplains are not considered to be floodplain harvesting works, and as such do not require approval under the policy additional to an approval already required for other purposes under the WM Act.



# The process of implementation

Implementing the Floodplain Harvesting Policy is a complex undertaking, and a process has been designed to address these complexities. Implementation will begin with a registration of interest and concludes with issuing the relevant work approvals and notifying licence holders of the terms and conditions of their access licences.

Implementation of the policy will take place in five stages.

1. **Registrations of interest**—The department will request water users to submit registrations of interest to obtain the necessary authorisations to undertake floodplain harvesting activities.
2. **Determining eligibility**—The registrations of interest will be examined against eligibility criteria to determine which works used or proposed for floodplain harvesting will qualify for further assessment.
3. **Issuing work approvals**—Eligible works, and applications for such works, will be assessed to determine their capability to harvest floodplain water, and, where such works are proposed to be operated outside the terms of an existing approval, their impacts on the environment. Based on these assessments, the department will issue work approvals to individuals.
4. **Incorporating floodplain harvesting in water sharing plans**—Existing water sharing plans will be amended to establish rules for the management of floodplain harvesting and provide that floodplain harvesting access licences be exercised in accordance with those rules.
5. **Issuing floodplain harvesting access licences**—The department will notify licence holders of the terms and conditions of floodplain harvesting access licences that are to be issued. Water accounts for individual licences will be credited with initial allocations.

The department will initiate implementation of the policy by setting the framework within which information on floodplain harvesting will be collected, works and extractions will be assessed, and work approvals and licences will be authorised.

This framework will include the following:

- **Switching on relevant provisions of the WM Act**—Part 3 of Chapter 3 of the WM Act will be switched on in relation to flood works. This will bring all works that fall within the definition of a flood work, including controlled works under the *Water Act 1912*, under the umbrella of the WM Act. However, any application in relation to an entitlement that was made under the provisions of the *Water Act 1912* before the WM Act is switched on will be dealt with solely under the *Water Act 1912* provisions.
- **Designating floodplains**—New floodplains will be designated and existing designations will be amended as appropriate. Initially, designations will cover the major floodplain areas in the five northern valleys where floodplain harvesting is most prominent: the Border Rivers, Gwydir, Barwon-Darling, Namoi and Macquarie. Additional floodplains will be designated as necessary.
- **Providing a temporary exemption for floodplain harvesting from specified licensing and approvals requirements of the WM Act**—An exemption is required so that floodplain harvesting by works constructed on or before 3 July 2008 can continue while the policy is being implemented. The exemption will apply only for the time required to issue work approvals, amend water sharing plans and issue floodplain harvesting access licences. Once implementation has concluded for a given floodplain, the exemption will no longer apply to that area and all floodplain harvesting activities will require a water supply work approval and a floodplain harvesting water access licence authorised under the WM Act.

**Exempting applications for work approvals from the advertising and appeal provisions of the WM Act**—Application of the normal advertising and appeal provisions of the WM Act is not appropriate under this policy, which involves assessment of and issuing approvals for a substantial number of existing works. The environmental assessment process described in the policy will consider environmental issues associated with individual works that are not covered by an existing approval, and the collective impact of flood works on floodplain flow paths will be considered in rural floodplain management plans.

- **Seeking additional information**—Existing applications may not include all information necessary to grant work approvals and authorise floodplain harvesting access licences. The Minister for Water will request information where necessary to implement the policy.
- **Establishing a review process**—There will be a review process to consider preliminary determinations made by the department and anomalies at several points in the process. Further details on the review process are provided later in this policy.
- **Setting the criteria by which floodplain harvesting access licences will be issued**—Floodplain harvesting access licences will be issued in accordance with objective criteria. The criteria are described in a subsequent section of this policy.
- **Amending the WM Act to allow contaminated water to be captured even when water users have insufficient balance remaining**—Water sharing plans will set rules for when floodplain water can be taken and how it will be accounted for to ensure there is no overall increase in water taken.
- **Developing and implementing a staged approach to floodplain harvesting monitoring**—A staged approach to the implementation of floodplain harvesting monitoring is proposed, with water users required to use gauge boards and calibrated storage curves during the first three years of implementation. An evaluation of this approach will occur within this time.
- **Developing floodplain harvesting licence account management rules**—Floodplain harvesting licensing account management rules can be developed on a valley-by-valley basis. Draft account management rules are included in the policy as a starting point. Other options may be developed and compared to find the most suitable rules for a given valley. Public consultation will then occur on the proposed rules as part of the water sharing planning process for that valley.

## Registration of interest

The department will invite people interested in obtaining the necessary authorisations to undertake floodplain harvesting activities to submit a registration of interest (ROI). This ensures the department has the necessary information to determine eligibility for detailed assessment under the policy.

At this initial stage, interested parties will be required only to submit information sufficient to make a determination of eligibility. If the department requires additional information in order to undertake the detailed capacity and environmental assessments, it will be requested at the time of the assessment.

## Determining eligibility

The second stage of implementation is to determine which works will be eligible for the detailed assessments undertaken for the purposes of issuing work approvals and authorising floodplain harvesting access licences. Works considered eligible are works capable of floodplain harvesting that, on or before 3 July 2008, were:

1. constructed on a floodplain in accordance with an approval granted pursuant to Part 2 or Part 8 of the *Water Act 1912* or the WM Act
2. subject to a pending application for an approval to construct the work on a floodplain under Part 2 or Part 8 of the *Water Act 1912* or WM Act

- constructed on a floodplain and for which it can be established, to the satisfaction of the Minister for Water, that the department did not require an approval under Part 2 or Part 8 of the *Water Act 1912*. In submitting an ROI relating to this category, the person submitting the ROI should provide evidence that the department did not require an approval for the works in question.

Existing works for which an application under the *Water Act 1912* or the WM Act was required and not made on or before the 3 July 2008 cut-off date will not be authorised for floodplain harvesting.

An assessment of eligibility against the criteria above will be conducted and people who submitted an ROI will be notified of the department's preliminary determination. If a person disagrees with a preliminary determination, they can request to have the determination reviewed. The review process is described in more detail later in this policy.

After requests for review have been considered, the department will make final determinations of eligibility for further assessment. A determination that an ROI is eligible for further assessment does not guarantee that a work approval or a water access licence will be authorised. For existing works that are determined not to be eligible for further assessment, the department may issue directions to remove or modify the works.

## Issuing work approvals

The third stage of implementation will be to issue work approvals according to the normal process under the WM Act. All works determined to be eligible for assessment will undergo a capability assessment. Works will also undergo an environmental assessment, except for works with approval under Part 2 or Part 8 of the *Water Act 1912* or WM Act that will be operated within the terms of that approval. Applicants for work approvals will be required to supply any information requested by the department to enable assessment of their works.

Based upon the information gathered through the capability and environmental assessments, the department will issue water supply work approvals to individuals. The information gathered in this stage will also assist with determining the share components for floodplain harvesting licences.

Not all works that are currently engaged in or capable of floodplain harvesting will necessarily be authorised for floodplain harvesting activities. For example, some works without existing approvals may be refused or required to be modified on environmental grounds. Work approvals may be issued with conditions to mitigate environmental impacts or to ensure that works can be operated to restrict harvesting to a specified volume.

## Capability assessments

The capability assessment will be used to determine the capability of works to harvest floodplain water. The assessment will consider the configuration of the works and any existing water access licences. The capability assessment will take into account capacity to store and use water, the frequency, magnitude and duration of flood events at that location, extraction capability and irrigation behaviour. This assessment is intended to allow consideration of not only the physical infrastructure used for floodplain harvesting, but also the opportunity irrigators may have to access floodplain flows depending on their location and climatic variability. The decisions made by irrigators in relation to other sources of supply and cropping will also be considered.

The capability assessment will require the applicants to certify a water infrastructure plan and to complete an irrigator behaviour questionnaire. The water infrastructure plan will identify and detail all works capable of undertaking floodplain harvesting. The irrigation behaviour questionnaire may request information such as crop history, crop water use, on-farm water balance, climatic information, stored volumes and other information relating to the irrigation activity's on-farm water balance.

Both the water infrastructure plan and the irrigator behaviour questionnaire will be assessed by the department against other sources of data including licensing records, satellite imagery and remote sensing to independently verify the information supplied by the applicant.

The capability assessment has two main functions. It will inform any required environmental assessment for the work approval, and it will inform the disaggregation of the remaining portion of the long-term average annual extraction limit volume to individual licences.

In addition, information gathered through the capability assessment process will be used to refine the floodplain harvesting estimates produced by river basin modelling.

## Environmental assessments

In order to grant a water supply work approval or a flood work approval under the WM Act, or grant a controlled work approval under the *Water Act 1912*, an assessment of the environmental impacts of the work must be carried out. Works proposed to be authorised for floodplain harvesting will undergo this environmental assessment, except for works which are already covered by an approval issued under Part 2 or Part 8 of the *Water Act 1912* or the WM Act. No additional assessment will be required for such works as long as the works will be operated within the terms of the approval.

The assessment required in order to grant an approval for a given work or set of works will depend on the extent to which existing approvals are sufficient to authorise the works for floodplain harvesting. Works with a valid *Water Act 1912* or WM Act approval that will be operated for floodplain harvesting purposes in ways that do not fall within the terms of the existing approval will require assessment of those operations that are not covered by the existing approval. Any works that do not have a valid *Water Act 1912* or WM Act approval will be assessed according to normal procedure.

Works will be assessed in relation to considerations including, but not limited to, the potential impact of floodplain extractions and changed flood flow distribution on threatened species, fish passage and breeding, groundwater connectivity, floodplain connectivity, wetlands and flood-dependent ecosystems, and other water users. Environmental assessments will consider the contribution of all existing works, whether authorised or not authorised, to the cumulative impact of water management activities. Environmental assessments will also draw on information relating to floodplain flow paths and environmental assets contained in rural floodplain management plans, where available.

In cases where existing approvals or applications do not include information sufficient to enable assessment of environmental impacts, the department may request additional information.

## Incorporating floodplain harvesting in water sharing plans

The fourth stage in implementing the policy is to take the actions necessary to incorporate floodplain harvesting in water sharing plans. This consists of updating long-term average annual extraction limit estimates and making other amendments to water sharing plans where necessary.

### Updating the long-term average annual extraction limit

The long-term average annual extraction limit (LTAAEL) established in a water sharing plan governs the bulk shares of water available to licence holders. In all water sources, the LTAAELs will be updated based on new information gathered through the assessment of eligible registrations of interest for floodplain harvesting, however the process for updating the LTAAEL estimates in regulated river water sources differs from the process used to update the LTAAELs in unregulated river water sources.

## LTAELs in regulated river water sources

The LTAELs for regulated rivers (and the Barwon–Darling) is determined using computer models that simulate river basin behaviour based on more than one hundred years of climate data, the amount of irrigation development in the water source and the applicable plan rules. The models are also used to determine compliance with these LTAELs.

The LTAEL already includes an estimate of floodplain harvesting extractions under the baseline conditions that were specified to set the original LTAEL. That estimate will be updated, based on the additional information regarding floodplain harvesting gained through capability assessments. For example, if baseline conditions specified in the water sharing plan for the original LTAEL referred to the water storages and water use development that existed in 1999–2000, the estimate of floodplain harvesting extractions will be updated under the conditions for 1999–2000.

In updating the modelled estimate for floodplain harvesting in a regulated water source, the department will establish a committee with irrigation stakeholders from each valley to consult on ways to maximise the robustness of the modelling and ensure that parameters relating to farm operations accurately reflect actual behaviour to the greatest degree feasible.

## LTAELs in unregulated river water sources

In unregulated river water sources (excluding the Barwon–Darling), the total volume of water available for floodplain harvesting is in most cases already accounted for within the existing access licence share components and the LTAELs. The reason is that when the *Water Act 1912* licences were volumetrically converted, the process was based on area planted and water needed to meet associated crop water requirements to work out a water demand. In order to validate associated crop water requirements, water users were also requested to provide information, if available, on how much water was extracted. This means that in most cases the issued access licence share components and unregulated river LTAELs effectively include floodplain harvesting extractions.

However, there may be instances in unregulated river water sources where existing floodplain harvesting works meet the eligibility criteria for assessment under this policy, but the floodplain harvesting extractions associated with the works are not included within issued share components and unregulated river LTAELs. Where this is the case, other than in the Barwon–Darling, the LTAEL will be recalculated to include an amount that equals the annual extraction averaged over the period from 1 July 1993 to 30 June 1999 by floodplain harvesting activities that were not included in unregulated river access licence share components during the volumetric conversion process.

While new licences may not be issued for floodplain harvesting in unregulated systems other than the Barwon–Darling, assessments for work approvals will still be required.

In the Barwon–Darling, floodplain harvesting activities were not typically accounted for and as a result the Barwon–Darling is treated like a regulated river in terms of its LTAEL.

## Amending water sharing plans

In order to bring floodplain harvesting access licences fully within the licensing, approvals and planning framework of the WM Act, the relevant water sharing plan must make provision for floodplain harvesting.

To achieve this, water sharing plans will be amended to include or make provision for the following types of new rules for floodplain harvesting: LTAEL compliance rules; water account management rules; mandatory conditions for access licences and associated water supply work approvals issued for floodplain harvesting; and access rules to minimise impacts on the environment and other water users.



## LTADEL compliance rules

Floodplain harvesting licence share components and water account rules in water sharing plans will be determined so that over the long term total water extractions comply with the LTADEL.

New rules for assessing compliance with the LTADEL will be included in water sharing plans to ensure that if there is growth in floodplain harvesting, it does not impact on other categories of licence and vice versa. In other words, growth above the LTADEL that is attributable to floodplain harvesting will result in reductions to floodplain harvesting licences only, and vice versa.

## Water account management rules

Floodplain harvesting is highly variable in nature. Account management rules will be developed on a valley-by-valley basis in conjunction with the proposed entitlements that recognise this variability. The two primary considerations that will be used to set these account management rules are:

- achieving the LTADEL
- distributing impacts as equitably as possible across individuals.

Account management rules that are established for each valley may include rules for:

- initial account balances
- limits on account balances
- allocation announcements to be made at the commencement of each water year
- carryover of unused allocations from one year to the next
- limits on annual use, both in the short- and long-term.

## Mandatory conditions

New mandatory condition rules may be included to allow the Minister for Water to require floodplain harvesting works to be modified if a relevant floodplain harvesting licence share component is reduced, for example as a result of a licence dealing.

## Access rules

Water sharing plan amendment rules may also allow the establishment of new access rules for floodplain harvesting licences to minimise impacts on the environment and other water users, provided these rules do not result in additional water being recovered for the environment. In the northern valleys, the first area where the policy is being implemented, access rules will not be included in the initial amendments. Instead, provision will be made for including these rules as a future amendment, to the extent that this can be achieved without reducing the overall extraction.

## Issuing floodplain harvesting access licences

The department will notify licence holders of the terms and conditions of floodplain harvesting access licences that are to be issued. Licences will be issued in association with all works that are determined to be eligible works and were constructed and capable of floodplain harvesting as of 3 July 2008. Floodplain harvesting access licences will also be issued in association with works that had not yet been constructed as of 3 July 2008, so long as those works are determined to be eligible works and subsequently are issued a water supply work approval to conduct floodplain harvesting. Floodplain harvesting access licences will not be issued in association with any work that was determined to be ineligible for assessment.

## Determining share components

The process for determining individual share components will vary depending on whether the water source is regulated or unregulated.

## Share components in regulated river water sources

Share components for individual floodplain harvesting access licences in regulated river water sources will be determined in two steps:

1. The long-term volume of water that all eligible works are capable of taking will be determined—this process will determine both individual and total floodplain harvesting volumes from eligible development
2. Scaling of individual floodplain harvesting volumes based on eligible development will be used in conjunction with account management rules to achieve a volume of entitlement that will not exceed the total LTAAEL and will distribute impacts as equitably as possible across individuals—this will determine a total share component for each individual.

The determination of share components will not be based on any history-of-use information. History-of-use information is considered to have several disadvantages for disaggregating the total floodplain harvesting volume, including:

- the lack of verifiable records for all existing users and therefore the potential for inequitable sharing of the available volume
- the inadequate coverage of existing measuring and monitoring systems
- the high climatic variability associated with floodplain harvesting events
- previous severe and prolonged droughts, which meant that opportunities for floodplain harvesting activities were limited, distorting historical use patterns.

In some cases, individual share components will not equal the capability of the works currently in place. Individuals whose existing works have the capability to harvest more than provided for by the share components and account management rules, will be required to either modify their works or their extraction behaviour (e.g. pumping practices). Floodplain harvesting access licence holders will not be authorised to take more water than is credited to the respective water allocation account for the access licence at the time water is taken. However, water sharing plans may set rules for when contaminated water may be taken, even when holders have insufficient balance remaining, providing flexibility while ensuring that no more water is taken overall.

It is also possible that once individual licences have been issued, estimates of the total long-term average annual take associated with floodplain harvesting could be recalculated due to better information or further improvements in model accuracy. In recognition of this possibility, water sharing plans will permit available water determinations for floodplain harvesting access licences to be adjusted. It should be noted that adjustments may be made in either direction. That is, the LTAAEL may be increased if improvements in model accuracy or available information indicate the model has underestimated floodplain harvesting extractions, or decreased if the model has overestimated them.

## Share components in unregulated river water sources

The process for determining share components for floodplain harvesting access licences in unregulated river water sources (except for the Barwon–Darling) will be different from that used in regulated water sources.

Where existing floodplain harvesting works in unregulated river water sources meet the eligibility criteria for assessment and it can be demonstrated that the area irrigated using water taken by those works is in addition to the area assessed during the volumetric conversion process, a new access licence may be issued. The share component of the issued access licence will be determined using the volumetric conversion process that was used for unregulated river access licences in the same water source.

## Process for issuing share components

In both regulated and unregulated water sources where floodplain harvesting access licences are issued, the department will make preliminary determinations of individual share components for all applications within that water source and notify the applicants. If an applicant disagrees with a preliminary determination of their individual share component, the applicant may make a submission to have the preliminary determination reviewed. The review process is described in more detail later in this policy.

After all submissions have been reviewed, the department will make a final determination of individual share components and licences will be issued.

## Tenure

Currently, under the WM Act, access licences continue until they are cancelled. Supplementary water access licences must be cancelled if the water sharing plan ceases to make provision for the extraction of water under such an access licence. Specific purpose access licences must be cancelled if the purpose for which the access licence was granted no longer exists. All other access licence types may only be cancelled if a breach of the WM Act has occurred. As they have no end date or cancellation trigger they are referred to as 'perpetual.'

'Floodplain harvesting access licences' are created as a separate category under the Water Management (General) Regulation 2018. They are not a specific purpose or supplementary licence and are therefore perpetual.



## Compensation

The WM Act makes compensation payable in certain circumstances consistent with the National Water Initiative. During the life of the first management plan, licence holders (other than supplementary access licence holders), including holders of floodplain harvesting access licences, whose water allocations are reduced by changes to the bulk access regime have the right to lodge a claim for compensation if the plan is amended and the amendment is not provided for in the plan. The Minister for Water has discretion over whether or not compensation should be paid.

After the first water sharing plan, the holders of specified access licences, including regulated river (floodplain harvesting) and unregulated river (floodplain harvesting) access licences, have a right to be paid compensation in the circumstances set out in section 87AA of the WM Act.

## Trading arrangements

Trading of floodplain harvesting access licences (previously known as permanent trading) will be permitted subject to the development of an appropriate trading framework that defines the types of trades permitted and any relevant trading restrictions.

Prior to any trade of floodplain harvesting access licences being approved, the current owner of the floodplain harvesting access licence (the vendor) will need to demonstrate how they will ensure that their works will no longer undertake the floodplain harvesting associated with the share component to be sold. The purchaser will need to have works approved for floodplain harvesting before taking water under the purchased share component.

The episodic nature of floodplain harvesting events and the unique conditions that exist on-farm mean that trading of water allocations for floodplain harvesting access licences is potentially problematic. The challenge such trading presents is ensuring that floodplain water is only taken once, by the person who has bought the water. As such these trades will be considered as soon as appropriate procedures to ensure compliance and appropriate measuring, monitoring, administrative and accounting processes can be put in place.

## Review process

In order to facilitate the orderly and equitable processing of ROIs in work approvals and floodplain harvesting access licences, the department will establish a review process to consider submissions on preliminary determinations on selected issues. Preliminary determinations upon which submissions can be made are limited to:

- determinations about whether the work is located on a property where all or part of that property lies within the designated floodplain
- cases in which existing floodplain designations do not adequately incorporate existing floodplain harvesting works
- determinations about whether the floodplain works are eligible for assessment under this policy
- determinations about the calculation of the share component of a floodplain harvesting access licence.

At stages of implementation where a review process is to take place, the department will notify all persons who submitted an ROI of its relevant preliminary determinations and invite requests for review.

The review process will be similar to the anomalies committees that were used in the volumetric conversion process for licences in unregulated rivers carried out by the department in 2000. It is intended that proceedings will be informal, with an opportunity to make both written and oral submissions. The department will inform persons requesting review of the details regarding the proceedings, such as the time for review and any requirements regarding submissions, at the time it

provides notification of preliminary determinations. Submissions may be made only by persons in relation to their own ROIs.

## Replacement and refurbishment of works

The policy will permit the replacement and refurbishment of existing floodplain harvesting works so long as there is no net increase in floodplain harvesting and no increased adverse environmental impact from such works. This allows water users to improve their irrigation efficiencies and on-farm water management.

The replacement or refurbishment of existing floodplain harvesting works may require a new or amended approval under the WM Act, which must be obtained prior to construction. If a new or amended approval is required, an environmental assessment will be undertaken in accordance with the normal assessment procedures.