



**Tamworth Regional Council**

**Water Sensitive Design  
Measures**

**(Draft Development Control  
Plan Amendment No. 14)**

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REGIONAL COUNCIL

**PLUMBING and BUILDING  
INDUSTRY WEBINAR**

**Wednesday 8<sup>th</sup> July 2020**

## Acknowledgement of Country

*'I would like to acknowledge the Gamilaroi/Kamilaroi people, who are the traditional custodians of this land. I would also like to pay respect to Elders past, present and emerging and extend that respect to other Aboriginal people present here today'*

Wednesday 8<sup>th</sup> July 2020

## House Rules

- Throughout the Webinar you will be on mute.
- Should you have a question please do so via the 'chat' feature located in the top right hand corner.
- We have the capability of unmuting attendees if needed and we ask that any background noise is kept to a minimum.
- During the Q&A Session we will do our best to answer all your questions however, if unable such questions will be taken on notice and answers distributed as soon as available after the Webinar.
- Please ask a question anytime throughout the presentation
- This presentation is being recorded and will be made available along with the questions and answers online after the event.

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## OVERVIEW

Time	Item	Description	Duration
4.35pm	<b>Welcome and Introduction</b>  Presenter: Genevieve Harrison	Acknowledgement of Country House Rules Public Exhibition Details : – <i>TRC Water Sensitive Design Measures – (Draft Development Control Plan Amendment No. 14)</i>	10 mins
4.45pm	<b>Small Scale Development</b>  Presenter: Sam Lobsey	Water Sensitive Design Essentials (WSDE) WSDE Key Points Swimming Pool Rainwater Tank requirement Fast Track Development	15 mins
5.00pm	<b>Water Sensitive Design Statements</b>  Presenter: Steve Brake	Water Sensitive Design Statements Quality and Quantity Targets Exemptions	15 mins
5.15pm	<b>Water Saving Rebate Scheme</b>  Presenter: Tracey Carr	What are the financial incentives for each WSD Measure?	10 mins
5.25pm	<b>Q&amp;A</b>	Questions for the Council Staff Panel	
5.45pm	<b>Wrap Up and Close</b>		

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## **TRC Water Sensitive Design Measures – (DRAFT Development Control Plan Amendment No. 14) - Public Exhibition Documents**

- The *Tamworth Regional Development Control Plan 2010 (TRDCP 2010)* came into effect on 21 January 2011.
- The Plan is reviewed regularly, both on an as-needs basis, and as a scheduled annual review, to ensure that the content remains consistent with the objectives defined by Council in response to consultation with the community and development industry.
- Amendment No. 14 is proposed following a Notice of Motion passed by Council at the Ordinary Council Meeting on 8 October 2019, wanting to urgently progress the development of a Draft Water Sensitive Design (WSD) Development Control Plan (DCP) to ensure that new development and subdivisions are designed to maximise water conservation, reuse and other measures.
- A workshop on the draft DCP amendments was held with Councillors and key staff on 20 November 2019.
- Further consultation was held with industry groups in late 2019.
- Amendment No. 14 is currently available for feedback from industry groups and the wider community until 4pm Friday 31 July.

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## Small Scale Development Water Sensitive Design Essentials

- Applicable to General Housing and Dual Occupancy Development controls
- Details must be provided demonstrating that a minimum of 3 out of 6 Water Sensitive Design Essentials has been achieved
- Does not apply to any residential development that does not include plumbing work

1. Water  
efficient  
appliances

4. Greywater  
diversion  
device

2. Rainwater  
tank

5. Greywater  
treatment  
device

3. Raingarden

6. Pre-  
plumbing for  
recycled water

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## Small Scale Development Water Sensitive Design Essentials

### 1. Water efficient appliances and fittings

- All proposed chosen appliances and fixtures with a Water Efficiency Labelling and Standards (WELS) rating shall have a minimum rating of 3-stars including water efficient showerheads and taps, dual flush toilets, hot water system diverters, and shower control devices.
- Captures non-BASIX development where residential development is <\$50,000.



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*Water efficient appliances and fittings with a minimum of three stars combined with sensible water use can help reduce unnecessary water usage and conserve town drinking water.*

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# Small Scale Development Water Sensitive Design Essentials

## 2. Rainwater tank

- Rainwater tanks must have a minimum capacity of a 1.5KL per toilet in the household and the tank(s) shall be connected to 50m<sup>2</sup> of roof area for each toilet.
- An appropriate mechanism is to be provided for automatically switching to the town water supply (if available) when the volume of water in the rainwater tank(s) is low.



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*Using rainwater to flush toilets and connect to the laundry will help the community conserve town drinking water.*

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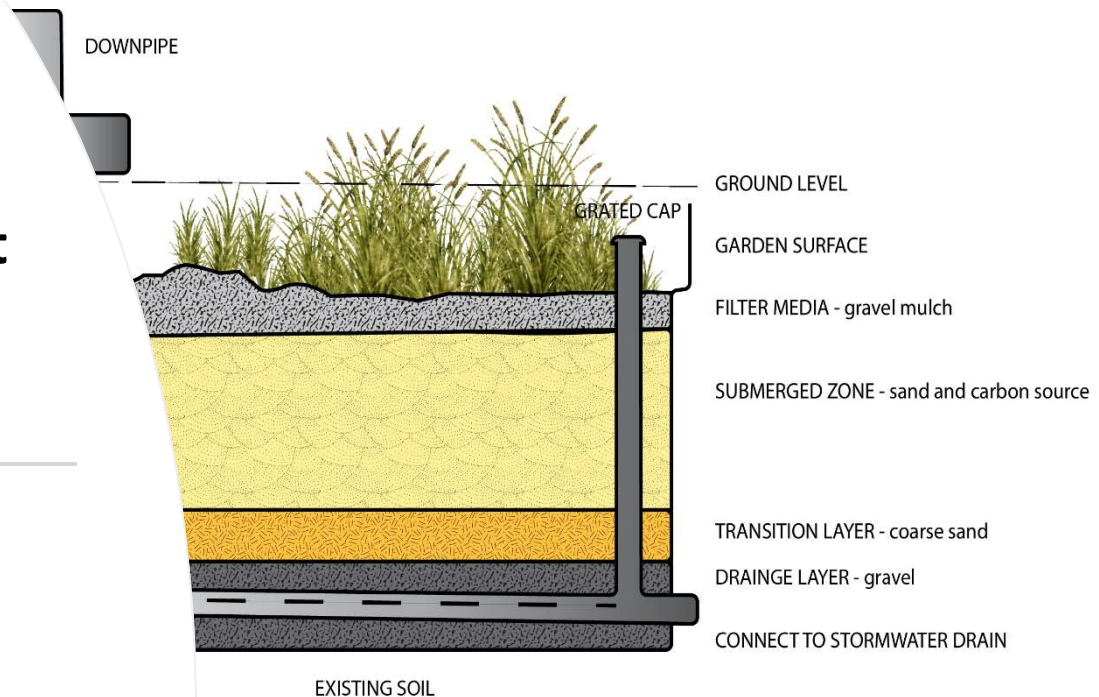


# Small Scale Development

## Water Sensitive Design Essentials

### 3. Raingarden

- A raingarden or landscaped stormwater retention area must have a filter media area sized at 1.5% of the contributing catchment area.
  - E.g 1.5% of 500m<sup>2</sup> (Roof and Hardstand Area) = 7.5m<sup>2</sup> Raingarden Area
- Raingardens are specially-designed garden beds that filter stormwater runoff from surrounding areas or stormwater pipes.
- Where a rainwater tank with at least 3000 litres is installed then a minimum of 2m<sup>2</sup> of retention area will be acceptable.



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*Raingardens can help keep our waterways healthy before water is released into the local drainage system;*

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## Small Scale Development Water Sensitive Design Essentials

### 4. Greywater diversion systems

- There are two types of devices that make up a Greywater Diversion system, Gravity and Pump Diversion (surge tank)
- The dedicated land application system (irrigation area) must be not less than 10 m<sup>2</sup>;
- At no times must untreated greywater be stored;
- Gravity diversion devices must not be installed below the “S” bend on any plumbing fitting.
- For a pump Diversion system – Regular maintenance is required by the resident to clean out the filter
- Any diversion valve should be located in a suitable location to allow for easy access
- Purple/lilac pipes are required for the irrigation lines
- Ensure that the dedicated land area for dispersion is maintained (e.g. switching off during cooler months when the temperature is not warm enough to assist with the evaporation process.
- The installation of any greywater diversion system, including the irrigation lines must be carried out by a licensed plumber

### how it works



*The device can be switched by the householder to divert greywater from the laundry tub and bathroom (where available by gravity or pump directly to the diversion line and the dedicated land application system (e.g. lawn or garden beds) instead of the sewer.*


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# Do I need approval to install a greywater diversion device?

You do not need an approval from Council when the following outcomes are met:

- It is installed by a Licensed Plumber (incl. irrigation lines)
- Greywater is directed from the laundry or bathroom (not toilet) only to the land dedication area for immediate use without making changes to its quality (greywater must not be stored).
- Greywater must be distributed by subsurface irrigation (at least 10 cm below the finished surface level of soil or mulch). Any surface irrigation will trigger an approval requirement
- The device must be a WaterMark licensed product; and
- The system is installed in accordance with Plumbing Code of Australia;
- The land must not have an existing on site sewage management facility.
- The following performance standards are achieved:
  - the prevention of the spread of disease by micro-organisms,
  - the prevention of the spread of foul odours,
  - the prevention of contamination of water,
  - the prevention of degradation of soil and vegetation,
  - the discouragement of insects and vermin,
- Ensure that persons do not come into contact with untreated sewage or effluent
- Minimisation of any impacts on the amenity of the premises and surrounding lands.

Recycling Greywater (Residential)  
Fact Sheet

  
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**Greywater Diversion - Self Assessment Checklist**  
under Clause 75A(2) of the Local Government Regulation 2005 (domestic greywater diversion may be carried out without the prior approval of the council)

Property Owner/s Name: \_\_\_\_\_

Property address:  
(Where system to be installed) \_\_\_\_\_

Licensed Plumber's Name: \_\_\_\_\_

Licence number: \_\_\_\_\_

Type of Diversion System: \_\_\_\_\_

I, being the owner of \_\_\_\_\_  
confirm that the following performance criteria under Clause 75A(2) of the Local Government Regulation 2005 has been met for the installation of the above greywater diversion system:-

☐ The system is installed in accordance with Plumbing Code of Australia;

☐ The land must not have an existing on site sewage management facility.

☐ The following performance standards are achieved:

- (i) the prevention of the spread of disease by micro-organisms,
- (ii) the prevention of the spread of foul odours,
- (iii) the prevention of contamination of water,
- (iv) the prevention of degradation of soil and vegetation,
- (v) the discouragement of insects and vermin,

☐ Ensure that persons do not come into contact with untreated sewage or effluent

☐ Minimisation of any impacts on the amenity of the premises and surrounding lands.

Please return this self assessment checklist, along with a copy of the Certificate of Compliance issued by the licensed plumber to Tamworth Regional Council. This can be done by email to [development@tamworth.nsw.gov.au](mailto:development@tamworth.nsw.gov.au) or hand delivered to any of Council's offices.

Checklist completed by: \_\_\_\_\_

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

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*The Greywater System Self Assessment Checklist will help determine if your system is permitted without Council approval.*

*Any diversion system that does not meet the exempt criteria will require approval from Council.*

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# Small Scale Development Water Sensitive Design Essentials

## 5. Greywater treatment device

- It is a form of on-site wastewater treatment.
- The owner of the premises must obtain approval from Council for installation and operation under Section 68 of the Local Government Act 1993 and Part 2, Division 4 Local Government (General) Regulation 2005.
- A council must not approve the installation unless they have been accredited by the NSW Department of Health.
- The system must be installed by a licensed plumber including the sub-surface irrigation.
- Where surface irrigation is proposed it must be endorsed by the manufacturer.



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*A greywater treatment device treats greywater for re-use on a property such as toilet flushing, washing machine and surface irrigation of gardens and lawn.*

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## Small Scale Development Water Sensitive Design Essentials

### 6. Pre-plumbing for recycled water

- For all new dwellings, plumbing for recycled water is a mandatory requirement. Two out of the remaining five Water Sensitive Design Essentials must also be selected.
- Pre-plumbing works for recycled water requires a licensed plumber to carry out the initial external drainage plumbing works that would allow a greywater diversion or greywater treatment device to be fitted to a home at a later date.
- Pre-plumbing external drainage to allow for Greywater in addition to Blackwater

*For many new home builds, slab on ground construction makes it difficult to retrofit greywater systems after the occupant has moved in. By making provisions for this through pre-plumbing works, the decision is made easier for a future home owner to install a greywater system*

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## **Small Scale Development**

### **Water Sensitive Design Essentials – Key Points**

- The 6 Water Sensitive Design Essentials apply to all General Housing and Ancillary Structure Developments including Dual Occupancy Development.
- Council's Water Sensitive Design Essentials do not apply to any residential development that does not include plumbing work (e.g. water, sewer, and stormwater plumbing work that is connecting to an existing stormwater system).
- BASIX Clarification – The provision of financial incentives through the Rebate Scheme enables Council to go further than the statewide Building Sustainability Index (BASIX) measures.
- Reasonable justification to vary the WSD development controls must be provided and accepted by Council where WSD Controls are not achieved.

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## **Small Scale Development Swimming Pools & New Rainwater Tank controls**

- Must have a rainwater tank not less than 3kl that is available on the property for topping up the pool.
- Applies to pools larger than 20kl.
- WSE controls do not apply to isolated pool development applications

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## Small Scale Development Fast Track Developments

- Council will issue a determination within 10 business days instead of 28 days for eligible residential development that complies with all relevant local controls.
- The following types of residential development may be 'fast tracked' where the proposal complies with the minimum DCP controls:
  - New Dwelling
  - Secondary Dwelling
  - Residential ancillary structures e.g. shed, carport, swimming pool etc.
  - Dual Occupancy
- Applications will need to comply with all relevant DCP clauses including new controls on WSD Essentials.

**FAST TRACK**  
**<10days**

*local controls are adopted in the DCP and reflect the outcomes sought by the community and the development industry*

Fast Track applications must be lodged online via Council's Online Development Hub:  
[www.tamworth.nsw.gov.au/developmenthub](http://www.tamworth.nsw.gov.au/developmenthub)

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## Water Sensitive Design Statements

- A Water Sensitive Design Statement WSDS will be required for:-
  - Large scale subdivision of more than 10 lots;
  - Industrial Developments; and
  - Commercial Developments.
- DCP Control Objectives:
  - To ensure that WSD infrastructure is incorporated in subdivision.
  - To reduce the demand for reticulated water from the town water supply by harvesting rainwater and urban stormwater runoff for use where appropriate, such as existing or proposed areas of open space.
  - To ensure that stormwater discharged from new development minimises adverse impacts on the environment and receiving waters.
  - To protect and restore aquatic ecosystems within the development site and downstream.
  - To ensure the function of the stormwater drainage and flood protection elements of designs are not compromised by incompatible or inappropriate WSD designs.
- WSDS must show how proposed development will meet the three targets of reduction in the use of potable water, improving stormwater quality and maintaining quantity.
- A Water Sensitive Design Statement is supported by figures and diagrams which demonstrate how the development satisfies the objectives of the Development Control Plan and the Water Sensitive Design performance criteria as outlined in quality and quantity targets.

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### Stormwater Quality and Quantity and Water Consumption Targets

Potable Water Consumption		
Component	Target	Intent
Reticulated water consumption for residential development	40% reduction in the consumption of reticulated water compared to baseline (to be consistent with BASIX)	Increase the level of water recycling, reduce the demand for reticulated water from the bulk water supply network, and help to alleviate the need for upgrades to bulk water infrastructure
Reticulated water consumption for all other development	40% reduction in the consumption of potable water for staff and customer facilities and outdoor use compared to baseline	

### Stormwater Quality Targets – Subdivision

Site Characteristics		Lots over 2,000 m <sup>2</sup> in size	Lots less than 2,000 m <sup>2</sup> in size
Target Reduction Loads *	Gross Pollutants	90%	90%
	Total Suspended Solids	Neutral or Beneficial Effect on Water Quality – meaning loads of pollutants from future development must be equivalent to or less than that from the existing land use prior to development	80%
	Total Phosphorus		65%
	Total Nitrogen		45%

\* Based on increased pollution generated from development without treatment

### Stormwater Quantity Targets

Stormwater Quantity	Flow rates (for environmental and infrastructure protection)
Target	Retention/detention structures shall be designed to maintain the existing undeveloped discharges for the range of storm durations and frequencies from 5 year ARI events up to and including 100-year ARI events.  Retention/detention structures with downstream established areas and no clear and safe overland flow paths shall be designed for the peak 100-year ARI storm with consideration of the sensitivity of the design given to 200-year ARI events.
Intent	Reduce the likelihood of increased rates of bed and bank erosion and damage to benthic habitat in waterways.  Ensure that the development does not result in increased stormwater flows that exceed the capacity of the external stormwater drainage infrastructure and/or exacerbate overland flow problems.

# Water Sensitive Design Statements Consumption, Quality and Quantity Targets

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## Water Sensitive Design Statements Exemptions

### Commercial and Industrial Development

- Alterations and additions to any other type of development where the increase to the overall impervious surface is less than 50% of the existing impervious surface area
- Any change of use development that does not involve alterations or additions
- Commercial or industrial development with an overall impervious surface area of less than 30% of the site area
- Car parks that have an impervious area less than 300 m<sup>2</sup>

### Subdivisions

- Boundary adjustments
- Strata subdivision
- Subdivision where the resultant lots are not connected to Council reticulated water or sewerage
- Minor subdivision that results in a total of 10 lots or less it is expected that the compliance with the Water Sensitive Design Essentials will occur on the individual lots at the time of further development.

### Residential Development

- Fast Track developments
- A dwelling house, dual occupancy, secondary dwelling included in a Council-approved Stormwater Strategy or Water Sensitive Design Statement which has considered Water Sensitive Design at the time of subdivision

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# Water Saving Rebate Scheme

- Through its Water Saving Rebate Scheme, Council is offering financial assistance to residents who install waterwise products in and around their home and at their businesses.
- This forms part of a program to make Tamworth 'The Waterwise Region'. Australia is the driest continent on earth and Tamworth can be a very dry place, so Council is proactive in assisting its residents and local businesses to optimise their water consumption.
- At the Ordinary Council Meeting held on Tuesday 17 December 2019, Council voted to extend the list of products available on the rebate scheme. These products are eligible for rebates from 18 December 2019. They include Council paying up to 50% of the purchase cost (with a maximum limit) for the following products: Swimming pool cover, 2-5 kilolitre rainwater tank, 5 -10 kilolitre and 10 Kilolitre or above rainwater tank, greywater diversion devices and greywater treatment devices, etc.
- There are a number of rebates available for devices, infrastructure and services relevant to industrial and commercial development.



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## Rainwater tanks

- Rebates for plumbed rainwater tanks apply to the capacity **above** BASIX requirements i.e. an *additional* 2000L is required above BASIX to be eligible for the small tank rebate
- Stand alone rainwater tank rebates apply to any stand alone tank and must not be plumbed to the house – water is for outdoor use only (pool filling or watering gardens). Stand alone tanks are eligible for a "rainwater in use" Council issued sign.

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## Water Saving Rebate Scheme – WSD Essentials

WSD Essential	Financial Incentive
Water efficient appliances and fittings	Rebates available for replacement of existing inefficient devices only – not for BASIX requirements
Rainwater tank	For capacity above BASIX requirements 2000-4999L – 50% up to \$200 5000-9999L – 50% up to \$800 10000 and above – 50% up to \$1000
Stand alone rainwater tank	2000-4999L – 50% up to \$100 5000-9999L – 50% up to \$400 10000 and above – 50% up to \$500
Raingarden	Ongoing savings on water notice
Greywater diversion device	50% up to \$150
Greywater treatment device	50% up to \$800
Pre-plumbing for recycled water	Nil

This session will be included in the webinar recording.

All questions and answers will be available along with the recording soon after the event.

All questions will contribute to the feedback received by the community during the Public Exhibition period.

## Q&A

**Wednesday 8<sup>th</sup> July 2020**



## **Q&A Panel :**

- Genevieve Harrison (Manager, Integrated Planning)  
[g.harrison@tamworth.nsw.gov.au](mailto:g.harrison@tamworth.nsw.gov.au)
- Sam Lobsey (Manager, Development)  
[s.lobsey@tamworth.nsw.gov.au](mailto:s.lobsey@tamworth.nsw.gov.au)
- Steve Brake (Manager, Development Engineering)  
[s.brake@tamworth.nsw.gov.au](mailto:s.brake@tamworth.nsw.gov.au)
- Tracey Carr (Sustainability Coordinator)  
[t.carr@tamworth.nsw.gov.au](mailto:t.carr@tamworth.nsw.gov.au)
- Nicole Chegwyn (Team Leader, Building Certification)  
[n.chegwyn@tamworth.nsw.gov.au](mailto:n.chegwyn@tamworth.nsw.gov.au)

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A recording of this Webinar will soon be available to view online on Tamworth Regional Council your voice webpage at: [yourvoice.tamworth.nsw.gov.au/water-sensitive-design](https://yourvoice.tamworth.nsw.gov.au/water-sensitive-design)

Please provide your Feedback by lodging a submission:

Go to:

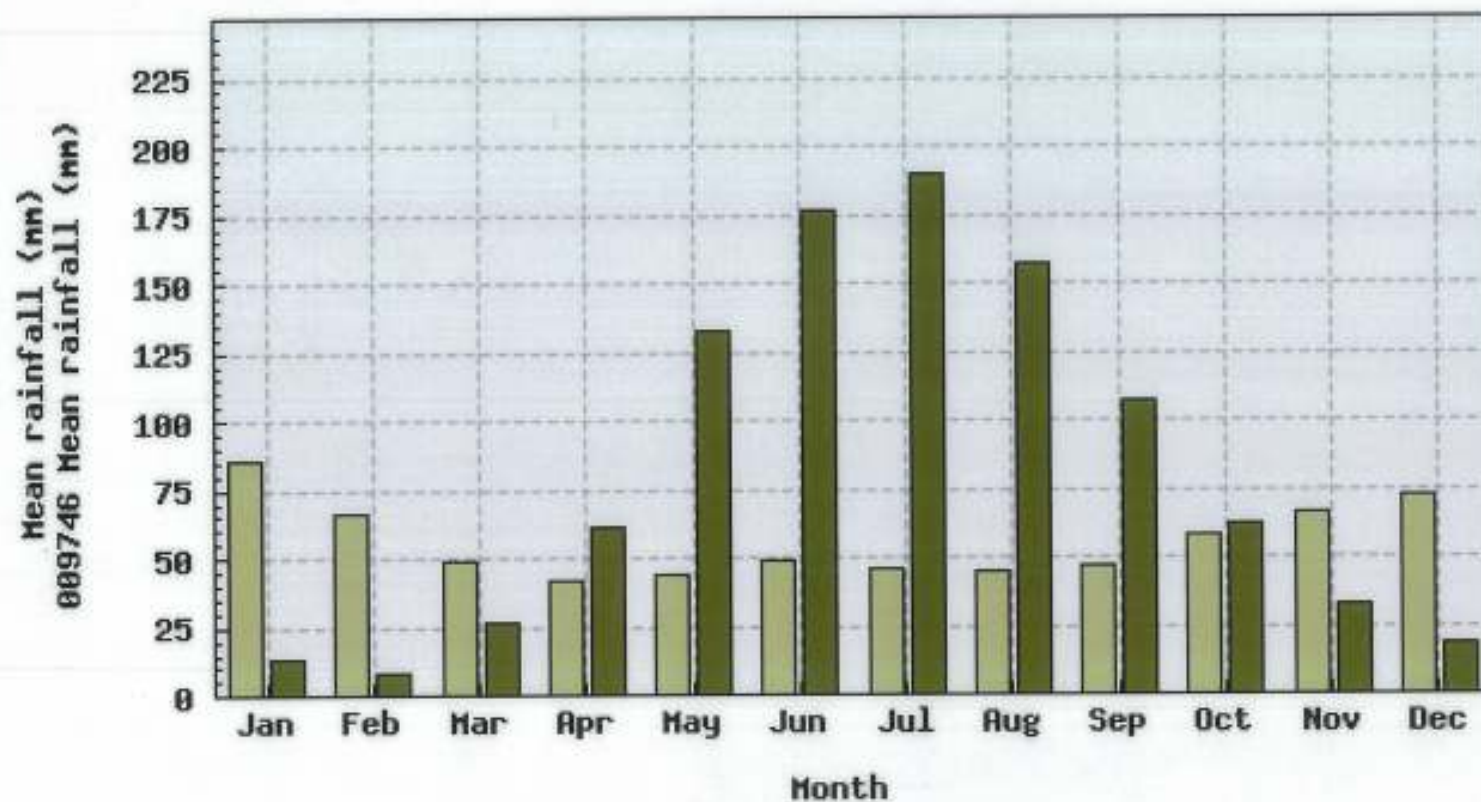
<https://www.tamworth.nsw.gov.au/about/news/public-notice>

And look for - *Notice of Public Exhibition - Development Control Plan - Amendment No. 14 - Water Sensitive Development Controls*

# Thankyou for your participation

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Location: 055054 TAMWORTH AIRPORT  
009746 WITCHCLIFFE



055054 Mean rainfall (mm)  
009746 Mean rainfall (mm)



Australian Government  
Bureau of Meteorology

Created on Tue 26 Nov 2019 16:42 PM AEDT

**Figure 5.2: Estimated annual sources of total phosphorus for selected catchments**

