

How we make decisions

The Department of Planning, Industry and Environment is supporting the health and resilience of rivers and wetlands by delivering water for the environment where and when it is needed.

We use the best available science, management expertise and experience to manage water across the landscape.

This statement of annual priorities identifies the waterways and wetlands that are likely to receive water under predicted weather conditions.

Our decision-making process considers:

- expected availability of water in the coming year
- conditions of the previous year
- current health of the flow-dependent plants and animals.
- The NSW Government works with the Commonwealth Environmental Water Holder to manage water in the catchment.

What is water for the environment?

Water for the environment is a share of the water in dams and rivers that is set aside to support the long-term health of local rivers, creeks and wetlands. Healthy rivers carry water to homes, farms, schools and businesses. Rivers are important cultural and spiritual sites for the Kamilaroi Traditional Owners.

About the Namoi catchment

The Namoi catchment is located in north-western NSW covering an area of approximately 42,000 square kilometres. It is bordered by the Gwydir and Castlereagh catchments. The major river system is the Namoi River, with tributaries including the Peel and Cockburn rivers and Goonoo Goonoo creek, with major water storages being Keepit, Split Rock and Chaffey dams. Significant environmental values in the catchment include the Namoi River between Gunnedah and Narrabri, which is identified as a key aquatic asset for inland New South Wales, providing critical habitat for significant native fish biodiversity and threatened species. Also, many small lagoons, wetlands and anabranches on the floodplain downstream of Narrabri provide habitat for a large number of waterbirds with Lake Goran being listed as a wetland of national significance.

Expected environmental water volumes available at 1 July 2019

Source	Maximum volume available	Volume expected at 1 July under current conditions
Peel Planned environmental water		
Environmental water allowance	5,000 megalitres	0 megalitres
Peel Water licenced to the Commonwealth		
General security	1,257 megalitres	0 megalitres
Upper Namoi licenced to the Commonwealth		
General security	105 megalitres	0 megalitres
Lower Namoi licenced to the Commonwealth		
General Security	13,548 megalitres	0 megalitres

Note: This is an indicative summary of volumes expected to be available. For further detail and information on available volumes, please contact the region via DPIE enquiries on 1300 361 967.

1 megalitre = 1,000,000 litres

2.5 megalitre = 1 Olympic swimming pool

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Cover photo: Nardoo in the Namoi. Photo: Neal Foster.
Page 2 infographic: J Humphries/DPIE.

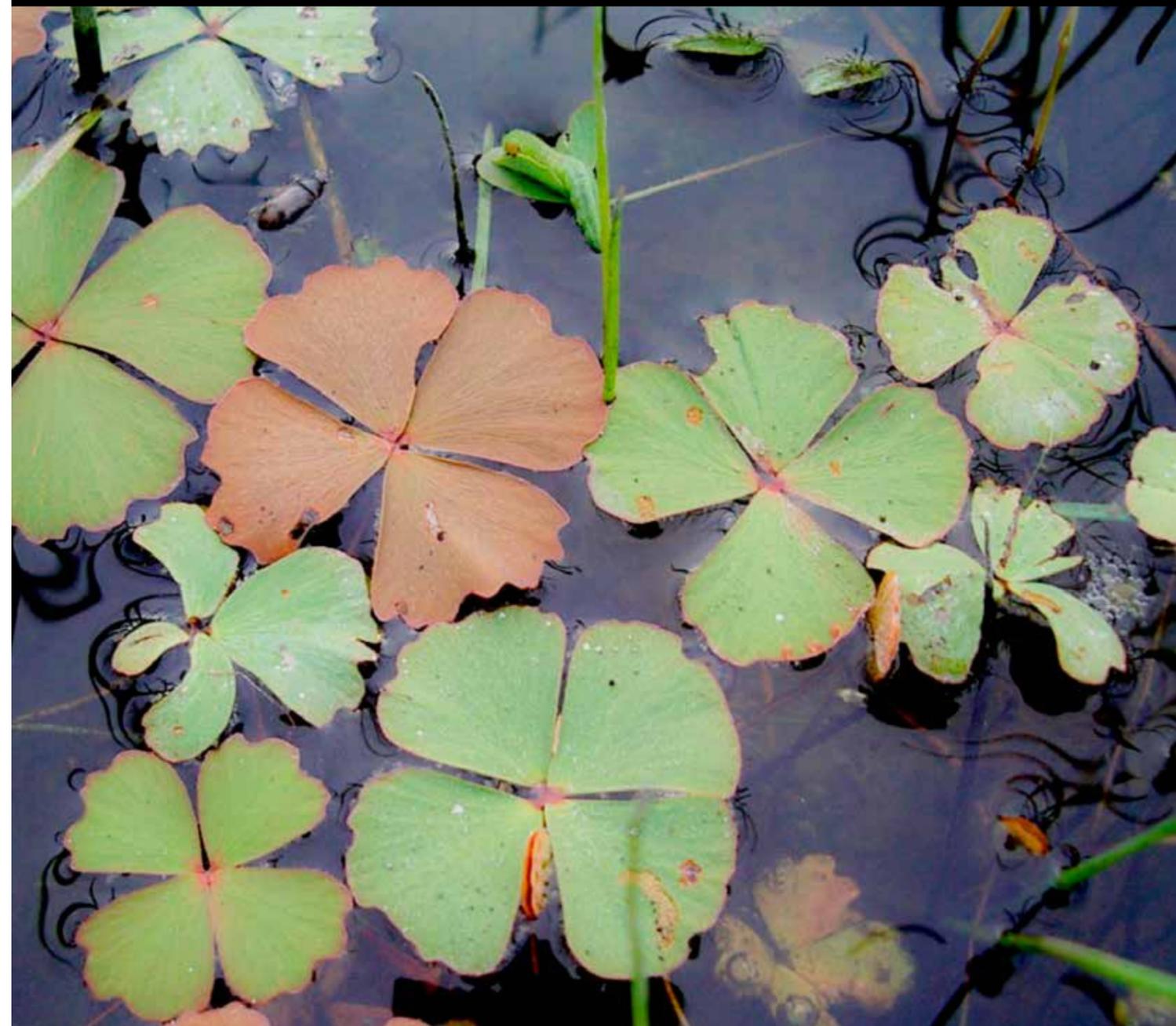
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NSW DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT

Namoi catchment

Annual Environmental Watering Priorities 2019–20



environment.nsw.gov.au

Water for rivers and wetlands

In 2019–20, water managers will focus their efforts on supporting native fish populations. With the prospect of no water for the environment available to support critical refuge habitat, the Department of Planning, Industry and Environment (DPIE) will work with WaterNSW to advise on how flows released for human needs can also help support the water quality and small-scale movement of native fish.

If the current drought continues, the greatest risk in the Namoi will be the capacity to provide a flow regime that protects fish refuges (deeper pools in the river) along the length of the Lower Namoi River to Walgett. In the Peel, the river between Dungowan and Carrol Gap will be the focus particularly during the warmer spring and summer period.

Supporting these refuges will allow native fish species to survive and provide the breeding stock to help their populations recover once the drought breaks.

Peel River

Under a minimum inflow scenario, Chaffey Dam will fall and remain below 20 per cent of active storage capacity from July through to January 2021.

Substantial inflows are required into Chaffey Dam before general security water for the environment is made available.

Lower Namoi River

Inflows and storage levels in the Namoi are the lowest ever recorded. Keepit Dam is empty and Split Rock dam is less than 2.5% of full supply level. The Lower Namoi is at Stage 4, critical drought.

Rainfall in April 2019 below Keepit Dam generated a small fresh along the full river length which provided a low volume connection flow with the Barwon River.

Substantial inflows are required into Keepit and Split Rock dams before general security water for the environment is made available.

Weather and water forecast

The Bureau of Meteorology (July 2019) forecasts drier than average conditions for much of Australia in the coming months. A positive Indian Ocean Dipole¹ typically brings below average winter–spring rainfall and above average temperatures. The chance of warmer than average temperatures in northern Australia is high, while southern Australia has roughly equal chances of warmer or cooler nights and more cloud-free days and nights. The ENSO² outlook remains neutral.

Water managers have prepared watering plans that take into consideration a range of weather and water availability scenarios. This is known as Resource Availability Scenario planning. Very dry to dry conditions are forecast for the Namoi and Peel catchment in 2019–20.

Key planned actions for 2019–20



Native fish

- No specific actions planned.
- New South Wales will incorporate (where possible) water release strategies to help support native fish refuge.



Vegetation

- No specific action planned.
- Riparian vegetation will be supported where regulated flows extend.



Waterbirds

- No specific action planned. We expect to see a reduction in the diversity and abundance of waterbirds as they leave the catchment to find alternative habitat.
- Refuge pools will support some minor waterbird habitat.



Connectivity

- No specific actions planned.
- Under drought operations, water will be supplied to service critical human needs with flows below Dungowan to Carol Gap unlikely.
- Under drought operations, the Namoi River between Keepit Dam and Walgett is likely to remain at cease to flow, with waterholes likely to continue to dry.

Resource availability scenario

Very dry

Main aim: Protect

- Avoid critical loss
- Maintain key refuges
- Avoid catastrophic events



Dry

Main aim: Maintain

- Maintain river functioning
- Maintain key functions of high priority wetlands



Moderate

Main aim: Recover

- Improve ecological health and resilience
- Improve opportunities for plants and animals to breed, move and thrive



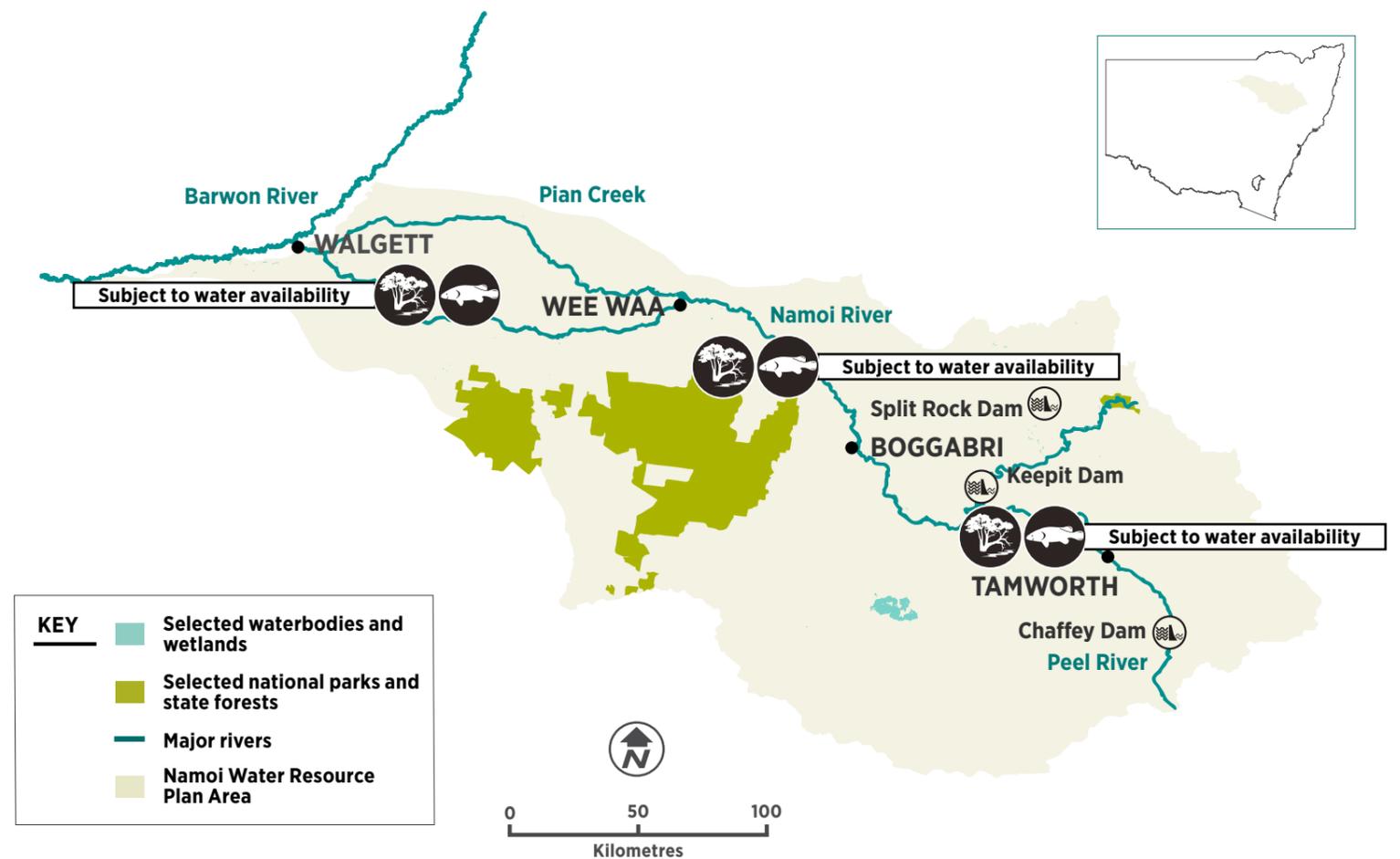
Wet to very wet

Main aim: Enhance

- Restore key floodplain and wetland linkages
- Enhance opportunities for plants and animals to breed, move and thrive



Map of proposed annual priority targets in the Namoi Water Resource Plan Area 2019–20



¹ IOD The difference between sea surface temperatures between two areas of the Indian Ocean.

² ENSO The interaction between the sea surface and atmosphere over the Pacific Ocean which results in dryer or wetter conditions (El Nino or La Nina). Both IOD and ENSO are considered key influences of weather in Australia.