

# WATER (Kapi)

**Tjungu Festival, Uluru. April 2018**

Tjungu (*pron.* tjoo-ngoo), meaning meeting or coming together in Pitjantjatjara, celebrates the best of Australian Indigenous culture. The Tjungu festival occurs in April 2018 at Uluru, NT.

- The purpose of this poster is to provide a story (as a non-aboriginal water scientist) of the water located in the heart of Central Australia.
- Uluru- Kata Juta National Park is internationally recognised as a World Heritage Area for outstanding natural & cultural values. Anangu land management has kept this country healthy for many generations.

**Introduction (Kapi);** Water is precious and necessary for survival.

Aboriginal people know the value and importance of water in arid areas-their life depends on it. Water is not just a resource to Aboriginal people, it is also part of their culture. Water is used very carefully, as it is scarce in Central Australia.

Uluru is situated within the semi arid zone of Central Australia. The temperature in summer can reach 47 C. The average rainfall in Uluru is approximately 307 mm/per year, however the annual evaporation rates exceed rainfall by almost ten times (2800 mm/per year). Uluru and Kata Juta are made of sedimentary rocks such as arkose sandstone and conglomerate. The red colour arises from weathering and the iron content.

Most of the water in the region is situated below ground and not visible, however the groundwater can be connected to scarce surface water bodies, and support vegetation, animals and link to sacred areas.

Groundwater is the only reliable water supply in the region, and occurs within ancient aquifers (Dune Plains Aquifer and Southern Aquifer). The Mutitjulu water hole at the base of Uluru is regarded as the only perennial water source.

Due to the low rainfall and high evaporation rates in Central Australia, surface water bodies are mostly temporary, with recharge or replenishment of the groundwater system being a very slow process (recharge to groundwater may only occur every decade).

The water is for all to share. Water inter-connects all things, which feeds and supports the built and natural environments.

## WATER (Kapi)

Water is the life blood of our earth and communities, whether you are staying at the Resort or bush walking around the Olgas.

**Water Scarcity;** Australia is one of the driest continents on this planet, however Aboriginal people have adapted for over 60,000 years and learnt ways to sustain their culture by finding food, water and bush medicine.

High water usage and consumption occurs in our urban areas and cities. Large dams and high annual rainfall in Australian coastal areas can support large populations. Our urban areas and cities show that the water resources are readily wasted and easily degraded due to the extensive use of chemicals, industrial activities, and uncontrolled litter.

In central Australia, care is required to manage groundwater extractions to minimise potential impacts to scarce groundwater and surface water resources. Replenishment of water resources is a slow and unpredictable process in the arid regions.

**Water is for All Purposes;** The water has so many purposes in every day life; drinking, cleaning & washing, cooking, cooling, and for healing and our well being.

Both the quantity and quality of water is important for both human health and the environment. At Uluru, various local and imported sources of water are used for the resort.

**Groundwater Sources;** Ancient groundwater is stored in the earth, kept cool and protected from human influences and the evaporative effects of the hot sun. The groundwater quality is unique to Uluru, it's full of healthy minerals and energy.

Groundwater occurs within ancient aquifers (Dune Plains Aquifer and Southern Aquifer), and are replenished by the rainfall, which is low and infrequent in the region due to high evaporation rates.

In central Australia, the rain which recharged/infiltrated the groundwater system (palaeo-channels and fractured rock) occurred a long time ago when the country (& planet) was free of industrial chemicals and pollution.



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The conservation of groundwater is essential for our generation, our childrens generations and for the future. Water is sacred and requires our respect and stewardship to protect it from being wasted or polluted. Miss-use and over extraction of local groundwater resources can cause water holes, springs and soaks to dry up, as groundwater and surface water are interconnected.

The water holes, soaks and springs support aboriginal culture and sustaining the local fauna and flora (which is used in bush medicine).

**Surface Water;** Surface water occurs in the region as water holes (tjukula), soaks (raalpa) and springs (kapi wala). Aboriginal people know the value of water in arid areas and need for all sources of water to be kept clean and clear.

### What Can be Done;

- Conservation: Please help to protect our water and keep it clean, do not waste it, and give due respect to the sacred water sources.
- Minimise Waste: Reducing the amount of waste created reduces the litter to be spread into the environment.
- Correct Disposal of Waste: Appropriate storage/disposal of medicines, cosmetic products and artificial foods/liquids.
- Drinking Water: The use of insulated glass water bottles is suggested over plastic drink bottles due to the odour & plastic taste in hot weather.

