# **ROGAINING TASMANIA**

# AUSTRALASIAN ROGAINING CHAMPIONSHIPS 2019



# **WATER PLAN**

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Rev	Description	Date
Α	Draft for review	6 Sep 2019
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## 1 INTRODUCTION

This document summarises the water management proposed for ARC 2019, to be held on 9-10 November 2019 at St Helens, Tasmania, and also sets out its basis.

Figure 1 shows the approximate area of the course and locations where competitors will be able to obtain water. Water at these sites will be checked and maintained throughout the event. All water sites are accessible by 2WD vehicle except W4 which requires a light 4WD.



Figure 1. Sources of water for competitors

#### 2 BASIS

This water plan is based on the following assumptions:

- Maximum of 300 competitors
- Maximum of 25 volunteers and other non-participants at HH and ANC
- Mild weather, 9<sup>th</sup> decile maximum temperature of 24°C
- HH will supply all water needs of competitors arriving by bus; car travellers are asked to bring water for their own use at the HH and to start the event
- Competitors will not collect water from streams
- Competitors will start with 2-3 L of water
- Competitors will on average use a total of 7 L of water, 4 L of which will be from water drops
- HH may use up to 500 L for kitchen and wash-up
- ANC will use up to 200 L for catering and wash-up

- Competitors may use up to 1 L each at the HH after the finish
- Water at the HH and ANC will be stored in a 1000 L IBC tank at each site
- All other water will be transported and stored in 20 L containers
- All water will be obtained from public supplies in St Helens; no water source at either HH or ANC

#### 3 WATER SUPPLY

1000 L IBC tanks will be filled on site by a local water carrier.

There is a pair of roadside taps available to the public in Quail St on the outskirts of St Helens. Filling the volume of water required for this event via ordinary taps will be time consuming. If necessary water can also be accessed from the TasWater source in Rex Court. Break O'Day Council are able to supply a key to the TasWater site on request.

#### 4 WATER DEMAND

TOTAL	3000 L	
ANC catering & washup	200 L	
HH volunteers during event (25 x 4 L)	100 L	
HH post-finish use by competitors (300 x 1 L)	300 L	
HH pre-start supply to competitors (300 x 2 L)	600 L	
HH catering and wash-up (350 competitors & volunteers, 2 L each)	600 L	
Water drops (300 competitors using 4 L each on average)		

About  $65 \times 20 \text{ L}$  containers are available. If water usage reaches or exceeds the estimates above some refilling during the event may be necessary.

High precision in planning is not critical because of the relative ease of getting additional water from St Helens. Not all of this water will have to be in place before the start of the event.

#### 5 WATER DROPS

There will be 10 water drops spread across the course as shown on Figure 1 plus the ANC which for present purposes also counts as a water drop.

Table 1 shows the proposed initial distribution of water across the water drop sites, based on judgements about how many competitors will visit each site and how likely they are to collect water. For example, W1, W2 and W3 are close to the HH and hence while they are likely to be passed by many competitors the proximity to the HH also means that only some of those competitors will have need for water, so a large supply seems unnecessary.

The ANC and W4 are allocated large quantities. The ANC will be a magnet for most competitors who reach the central part of the course and can reasonably be expected to have a higher demand than any other site. W4 has two special features: it seems likely to attract high demand from competitors moving through the north-central area of the course as there are no other water drops nearby and it is on a rough road so will be checked by a patrol vehicle perhaps only once during the event.

Table 1. Water drop distribution

Location	% of water supply	Water volume, L	20 L drums
ANC	25%	300	15
W1	8%	96	5
W2	8%	96	5
W3	8%	96	5
W4	13%	156	8
W5	6%	72	4
W6	6%	72	4
W7	5%	60	3
W8	5%	60	3
W9	8%	96	5
W10	8%	96	5
Total	100%	1200	62

## **6 WATER DROP UPKEEP**

All water drops except W4 are on good public roads and will be checked by a vehicle patrol at intervals of nominally 4 h (these patrols will also provide support to any competitors who need it). W4 is on a vehicle track suitable for a light 4WD (e.g. Subaru) and will be set up with a very generous initial supply checked at least once around the middle of the event. Patrol vehicles will carry additional water containers to top up any other sites that are running low.

Total patrol distance is 80 km and should be completed within 2 h (excluding W4 which may add 20 min). The volunteer roster allocates patrol duties to three drivers (each with their own vehicle) who do two patrols each. These drivers have good navigational skills (mostly part of the course setting team) and will have no difficulty finding the water drops.

There are other suitable vehicles available among the organising team. Should a patrol vehicle be diverted to assist a team in difficulty then there are sufficient reserve vehicles and drivers to allow the remainder of that patrol to be completed with only minor delay. Patrol vehicles will carry a phone with an Optus SIM which has reasonable reception over most of the course area.