WSPP

Water Service Providers' Partnership

Dayboro Drought Response Plan

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Unitywater

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WATER FOR LIFE

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Introduction

Unitywater, Seqwater and other key stakeholders work together to supply reliable, affordable and sustainable drinking water to consumers in South East Queensland (SEQ), both now and in the future.

Seqwater owns and operates the region's bulk water supply system including dams and weirs; water treatment plants; and climate resilient water sources. The interconnected SEQ Water Grid forms the majority of the bulk water supply system and enables us to move drinking water to where it is needed. While most South East Queenslanders are serviced by the Water Grid, we also supply drinking water to about 55,000 people living in off-grid communities – rural towns and island communities that are not connected to the Grid, but form part of the bulk water supply system.

Each of these off-grid communities have their own local water source and management of this water is supported by a Drought Response Plan, which outlines how water will be managed when local supply becomes limited, to ensure levels of service are met.

This Drought Response plan outlines drought response measures that will be put in place to respond to drought.

Unitywater is the "Water Retailer" for Dayboro, taking water from the bulk water supply system and delivering it to households and businesses in Dayboro as well as the rest of the Moreton Bay, Sunshine Coast and Noosa local authority areas.

About Dayboro

Dayboro is located within the Moreton Bay Regional Council (MBRC) local government area. The township is situated on Terrors Creek, upstream of the junction with the North Pine River. The primary water source for the town is the Dayboro borefield, an alluvial aquifer in close proximity to the North Pine River (refer Figure 1).

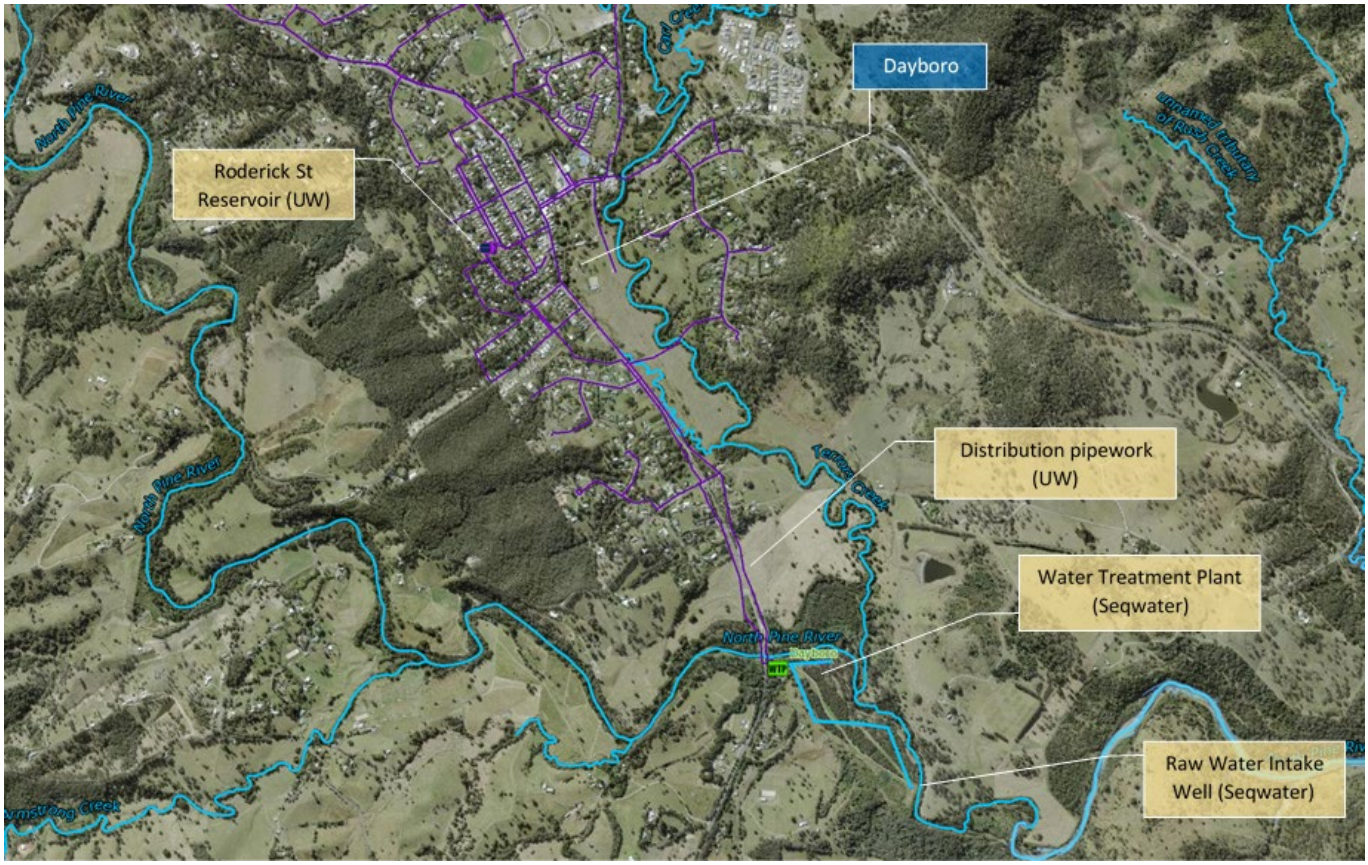

Figure 1: Water Supply Overview

Source: Seqwater Spatial

North Pine River is part of the Pine Valley Water Basin. The Pine Valley Water Supply Scheme is administered by the Department of Regional Development, Manufacturing and Water (DRDMW), which is responsible for managing water resources across Queensland, including providing sustainable water allocation for the environment, agriculture, industries and population centers. The entitlement associated with the supply to the Dayboro township is not defined. Dayboro Water Treatment Plant does not require a specific entitlement as the groundwater source is not part of a managed area (s101c *Water Act 2000*).

Seqwater sources raw water from two shallow bores located alongside the river and treats that water using a local Water Treatment Plant, to supply drinking water to the township of Dayboro, including a local Tanker Filling Station. The Treatment Plant has a capacity of 1.1 ML/day and caters to current and future demand within the planning horizon. The Dayboro township water supply is considered a run-of-river system, and although there is a wet well which facilitates pumping to the water treatment plant, there is currently no storage for source water upstream of the treatment plant. As such, the full Treatment Plant capacity can only be realised when there is sufficient water available in the river.

When there is insufficient raw water available for the Treatment Plant to run at the required flow rate, or at all, there is facility available at the Treatment Plant for treated water to be tankered in. The volume of water that

tankers can supply to the town is based on potable water demand and the availability and capability of required assets, and can also be limited by potential impact to local traffic and the community.

Unitywater is responsible for delivering the treated water to the homes and businesses in Dayboro. Unitywater also own a Tanker Filling Station that it is generally available for customer use. The water purchased from the Tanker Filling Station is included in the volume provided by the Treatment Plant and/or carted to the Plant during drought, and as such may be limited at times (this is described further in the Drought Response Plan).

Drought Response Plan: Dayboro

Water supplies in drought will be managed through a combination of demand management and supplementing supplies with water carting. Specific triggers have been identified for drought response actions (Figure 2 and Table 1) to provide clarity for planning. The actions listed are not intended to be limiting – additional actions may be required for drought response. Seqwater will monitor the bore levels and advise Unitywater when each trigger is reached.

Demand Management

Unitywater is responsible for implementation of Demand Management initiatives, including water restrictions.

This Drought Response Plan outlines measures necessary to sustain water supplies to the local community in times of drought, due to a shortage in their local water supply availability. From this perspective, it is not necessary for the local community to be subject to restrictions that apply to regional drought triggers, however, Unitywater could implement water restrictions if Seqwater has to cart water into Dayboro to maintain the supply.

The Unitywater Tanker Filling Station is located 2.5 km North of Dayboro Water Treatment Plant. Generally, the Tanker Filling Station is available to provide treated water for local off-network households and commercial carters.

When the local area is experiencing dry conditions, demand for water from the Tanker Filling Station typically increases, as residents from nearby off-network households seek to supplement their water supply. As such, from Drought Trigger level 2, commercial water carting companies may be encouraged or required to source their water from elsewhere (such as Clear Mountain, Petrie, Samford). Measures may also be implemented to limit the take from the Tanker Filling Station. However, the Dayboro Tanker Filling Station will remain open for direct use by local off-network households.

Contingency Supply

Seqwater commits to tankering up to 521 kL/d when water is no longer available from the bore, and Unitywater commits to managing local demand within this volume.

The water carters engaged by Seqwater during drought will source water from the SEQ water grid and will follow a traffic management plan designed to limit the impact to traffic through the town of Dayboro.

Future Drought Response Plans for Dayboro

The Drought Response Plan has been developed based on currently available infrastructure. The Drought Response Plan will be updated every 5 years or if there are changes to the local infrastructure.

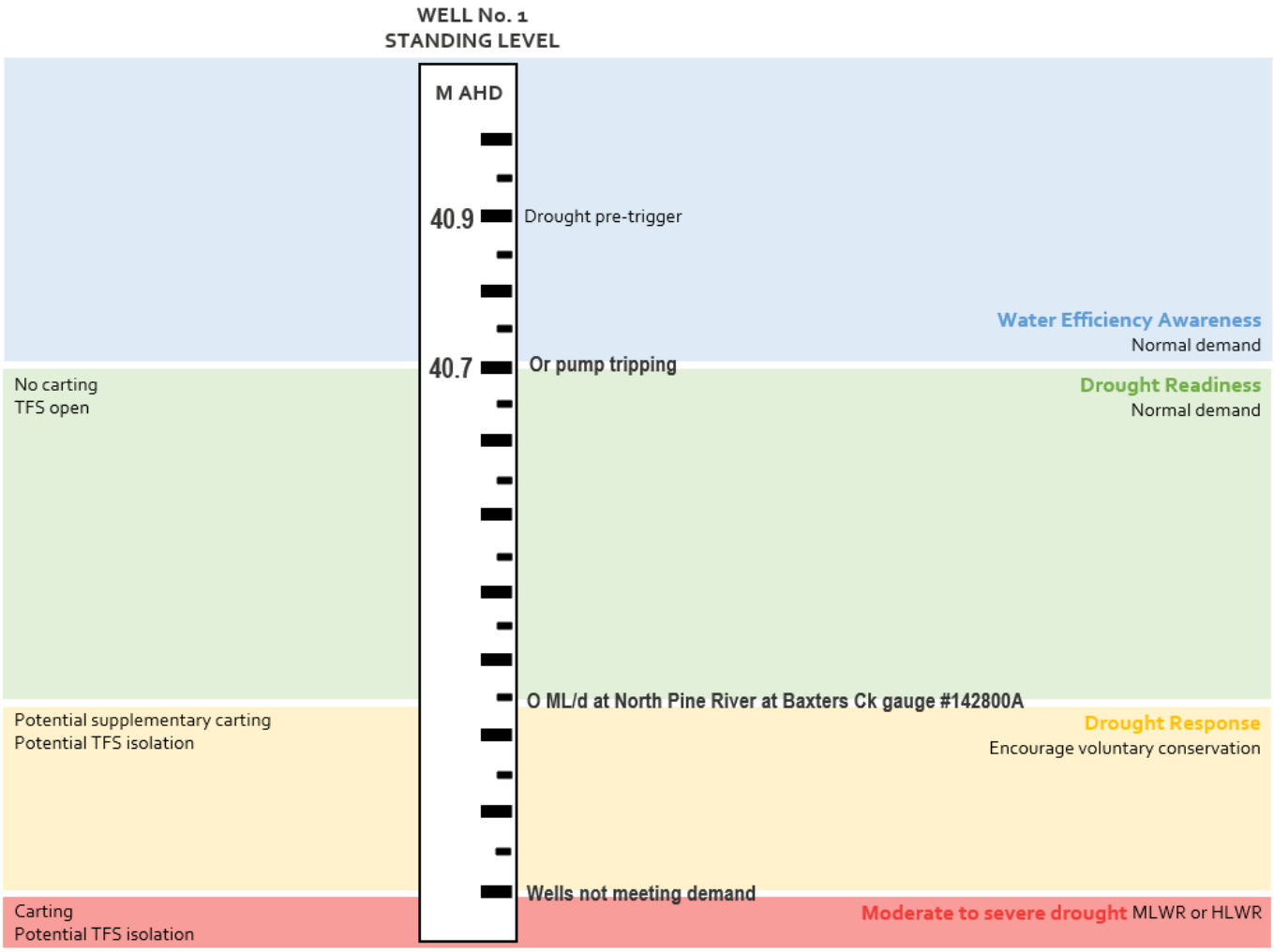

Figure 2: Dayboro Drought Response Overview

TFS = Tanker filling station, MLWR = Medium level water restrictions. HLWR = High level water restrictions

Table 1: Dayboro Summary Drought Response Plan

Level	Trigger (Local Supply Level)	Residential Demand Management	Water Carting	Tanker Filling Station (TFS) / Hydrant Standpipe Access	Monitoring Local Supply Availability	Note
Responsibility	**Set by Seqwater**	**Unitywater**	**Seqwater**	**Unitywater**	**Seqwater**	
Normal operations	Well No. 1 standing level above 40.9 m AHD	Normal demand			Monthly	
Drought pre-trigger	Well No. 1 standing level falls below RL 40.9 m AHD	Normal demand			Weekly	
1 - Drought readiness	Experiencing problems with bores drawing down close to and/or tripping stop pump trigger, and/or Well No. 1 standing level falls below RL 40.7 m AHD	Normal demand			Weekly	
2 – Drought response	River not running and standing level dropping and/or wells not recharging during production	Communications encouraging voluntary conservation	Potential supplementary carting	• Potential TFS isolation and hydrant standpipe restrictions • Commercial water carters will be encouraged to source water from elsewhere	Daily	Water for carting will be sourced from the water grid
3 – Moderate to severe drought	Wells not meeting demand	Medium to High Level Water Restrictions Encourage 140-120 L/p/d	Carting up to 521 KL/d	As above	Daily	

Note: Drought exit will be staged as water supply achieves the level of each preceding drought trigger level, with removal of actions at each level as appropriate.