# Your details Title Mr First name Robert Last name Horner **Submission details** I am making this submission as Other **Submission type** I am submitting on behalf of my organisation Organisation making the submission (if applicable) Shoalhaven City Council Your position in the organisation (if applicable) Acting Director, Shoalhaven Water Consent to make submission public I give my consent for this submission to be made public Share your experience or tell your story

Shoalhaven Water, a Group of Shoalhaven City Council provides water and sewerage services to nearly 50,000 properties in the Shoalhaven Local Government area, from Berry in the north to Lake Tabourie in the south, and Kangaroo Valley in the west. Shoalhaven Water operates 13 sewerage schemes and 4 water supply schemes. Total

Your story

asset value of these schemes is around \$1.3 billion.

For the duration of the Currowan/Tianjara fire events our infrastructure and technical and support staff (many of whom returned from holidays to assist) were placed under extreme pressure to endeavor to continuously provide these essential services, and our staff operated extremely effectively. While limited infrastructure was destroyed by fire there were considerable challenges to maintain water supply to all areas constantly, due primarily to extensive power outages (to water treatment plants, pumping stations and motorized valves) and limited access to infrastructure due to obstruction and other fire related events. These obstructions often presented unacceptable safety compromise and risk to Shoalhaven Water staff. At no stage throughout the whole fire event was water supply "switched off" to any Town, Village or other area in the Shoalhaven. Our staff were emotionally impacted by the knowledge that one of our recently retired (and much loved) employees had passed away defending his property at Myrtle Gully Road on New Years Eve. It is a time I will never forget as our staff bandied together to fight this situation saying "this is what Laurie would want".

## **Terms of Reference (optional)**

The Inquiry welcomes submissions that address the particular matters identified in its **Terms of Reference**.

#### 1.2 Preparation and planning

Extensive vegetation/ground clearing around critical water and sewerage infrastructure was undertaken prior to the fire impact. This was undertaken following a directive of the Shoalhaven LEOCON at the Shoalhaven EOC. These activities no doubt saved critical infrastructure that would likely have been lost if the clearing activities not been undertaken. Had critical water supply assets been destroyed the Shoalhaven could potentially have been in the catastrophic position of not being able to provide a constant water supply to large areas throughout the City. Generators were deployed to critical infrastructure sites in preparation for scenarios of limited access to these sites during the fires.

#### 1.3 Response to bushfires

A recurring concern gained through community engagement in one area of the Shoalhaven has been that of disrupted supply and loss of water in the period immediately prior to, and as the fire was attacking homes. Conjola Park property owners experienced particularly low (and at times, zero) water pressures at various times on New Years Eve (NYE). Power supply was lost to water supply reservoirs at Fisherman's Paradise and Lake Conjola at 10:40am and 11:40am respectively on NYE. Power was then lost to the critical Conjola Water Pumping Station (WPS) at 11:50am. This WPS pumps water to Conjola and Fishermans Paradise reservoirs which are the primary sources to Fishermans Paradise, Lake Conjola and Conjola Park. It is also a critical asset in the transfer of water from the northern Shoalhaven to the southern Shoalhaven. Telemetry was maintained to these sites for a period of time by utilizing battery back-up so Shoalhaven Water staff could continue to monitor reservoir levels until those batteries lost charge. At 11:19am the Fishermans Paradise reservoir was at 67% of capacity (2.68 ML) with an outflow of 108 l/s. The reservoir showed nil capacity at 6pm. At 11:15am Conjola reservoir was at 71% of capacity (500kL) with an outflow of 38 l/s. Backup battery power ran out and it is estimated that the Conjola reservoir was at zero capacity around 3pm on NYE. Due to the loss of power to Conjola WPS, Fishermans Paradise and Conjola reservoirs could not be filled. The loss of power to the Conjola WPS also meant that water could not be transferred from the northern system to the southern system at Milton (which our operations normally relies on). This meant that the southern supply was totally reliant on the Milton Water Treatment Plant and Porters Creek Dam, which themselves were severely impacted by fire (and could not provide the total water required under this situation). Shoalhaven Water staff, under emergency services escort, delivered a large generator to the Conjola WPS site at approximately 9pm on NYE. Our staff could not access Fishermans Paradise reservoir due to fallen and burning trees. While Shoalhaven Water confirms water was maintained in the Conjola reservoir until the estimated 3pm it cannot determine how many properties (and fire fighting authorities) were utilizing water simultaneously in Lake Conjola and Conjola Park, other than to say the demand was excessive, due to the rate at which water level in the Conjola reservoir was dropping (38l/s). This extensive usage throughout the area has the potential to substantially limit the water supply available to properties on higher ground (in this case Conjola Park), particularly as water level drops in the reservoirs (lower static pressure). At no time did Shoalhaven Water "switch off" water supply to this or any other area in the Shoalhaven. There were occasions where media releases were made to advise property owners to carefully manage their water usage due to depleting reservoir levels, and situations where bottled water was deployed to those areas

with limited water supply.

### 1.4 Any other matters

While this was an extraordinary event that is hoped will never be experienced again, Shoalhaven Water is proactively investigating methods to build further resilience into its water supply and sewerage schemes, not only in the Conjola area but throughout the whole City. Community expectations of town water supplies are understandably much greater than that of current design standards in these unique situations. The expectation of town water supplies is greater than just providing domestic water supplies and this is possibly an area for the Government to consider. Our water supply systems are not designed to manage the demands that can be put on them by such significant bushfire events.

## **Supporting documents or images**