

Permanent line replacement in Junee Resurgence (JF 8) first sump

Janine McKinnon
STC

THE PERMANENT line that runs through the first sump of JF8 was laid by TCC (Tasmanian Caverneering Club) in 1981 and 1982, over many dives.

It has certainly stood the test of time. The resurgence takes extremely high flow and fierce currents for much of the year and it is a testament to how well they did the job that the line has remained intact and taut for three decades.

However, all things decay with time, and this line reached the end of its useful life in the summer of 2013, when a section broke whilst we were in the cave. Given the age of the line, this meant the whole line was now no longer trustworthy and needed replacing. That summer came to an end before I got the job planned.

I applied to ASF for a grant to fund the purchase of the new line.

The sump has a surveyed length of 230 m so I anticipated that I would need at least 400 m of line. The number of tie-offs required, where the optimal position to lay the line is, and several other factors can markedly increase the amount of line needed beyond the actual length of the passage.

I asked for money to fund a purchase of extra line to be available if needed, or used on other projects in the pipeline if surplus to this job.

The ASF Grants Committee was kind enough to support my application.

So, with the next summer here, line purchased, and plan for how to re-line determined, it was all go in early January 2014. I had expected to have to do this job alone, but fortunately Ken Murrey (Cave Divers Association of Australia (CDAA) and VSA member) was visiting from Victoria and offered to help with the first trip, and Michael Pax (Pax), a diving buddy and CDAA and ASF member, bounced with enthusiasm (literally) when I mentioned it and asked if he were interested in being involved.

It was looking like a lot less solitary task than I had thought.



Pax, Ken and Peter getting organised for the first dive

The overall plan was to lay the new line alongside the old one first, secure it properly, and then remove the old line. This was envisioned to take at least four trips to accomplish, maybe more. Each diver would dive independently on all trips.

I cut 100 m from the 400 m roll of line, and put that aside. I then found an old travel bag large enough to fit the spool of line still coiled as I had bought it.

Three hundred metres of line filled this bag, and it was quite heavy and bulky, so I thought that would be enough for the first trip.

I didn't expect it to reach the full length of the sump, but there is only so much you can do each trip in 6°C water temperature, poor visibility and high current. The whole job was going to take many trips, and Pax and I were happy to take a couple of trips to lay the new line if necessary.

Ric Tunney and Peter Freeman joined us on the first trip to help sherpa gear to and from the start of the sump, which is a couple of hundred metres inside the cave.

The line laying went so smoothly that we reached the end of the sump and surfaced in For Your Eyes Only (FYEO) chamber. It was even more surprising that we still had a little line left in the bag. The job was starting much more easily than I had envisioned.

Two weeks later Pax and I were back to start removing the old line and finish securing the new one.

Pax was on new line duty and I drew the short straw of removing the old line. This old line was of several types throughout the sump, but was never less than 9 mm rope, and about 60 m was 11 mm rope. In contrast, the new line we had laid was 7 mm.

I carried two caving packs to stuff the old line into and when I had filled these I turned for home.

I had managed to remove 70 m of line in a 55-minute dive. I was happy to call that enough for the day as I was getting cold in the 6°C water, but my patience was the real bit that had been exhausted by then. Cutting and stuffing thick rope into packs underwater in a current was annoying, to

PERMANENT LINE REPLACEMENT IN JUNEE RESURGENCE (JF 8) FIRST SUMP

say the least. Pax had tidied up about a half of the dive, by his 'guesstimation'.

Two more trips, at two week intervals, were needed to finish removing the old line and properly secure the new one. Pax stayed on new line duty, and me on old line removal duty, for all the dives.

Much as I was really developing a dislike of stuffing thick, stiff rope into packs underwater (and not getting much better at it with all this practice), it made sense to stay with the jobs we were doing.

I removed three cave packs of line on the third trip, for a dive time of one hour, and the last dive was 100 minutes for me, with two bags of rope (it had proved a little more complicated than previous dives getting some of the line at the far end of the sump cut and bagged). Pax had spent similar times in the water each dive.

I measured each length of rope removed: total line removed from the sump



JANINE MCKINNON

A lot of gear to carry to the sump

was 215 m. I did not measure, or remove, tie-off loops and knots, or measure the lengths with precision, so I would allow for 10% more line to have been removed. This makes the total closer to 235 m.

I will be very happy if our job lasts half as long as the original line. The first test will be to see if our new line survives its first winter floods.

I will breathe easier if it is intact next summer.

Thanks must go to Ric Tunney who helped carry gear (well, my gear specifically) to and from the start of the sump for every trip.

He also doubled as emergency surface guy, in case this was needed. This is a very important role and made both Pax and I feel psychologically much happier.

FURTHER READING

McKinnon, J. 2013. JF8 Junee Cave, 16-17 Feb 2013. *Speleo Spiel* 395: 5-6.

McKinnon, J. 2014. JF8 Junee Resurgence Permanent line replacement, 11 Jan. 14, *Speleo Spiel* 400: 1011.

McKinnon, J. 2014. JF8 Junee Resurgence Finishing the reline of sump 1, 28 Jan. 14, *Speleo Spiel* 401: 5.

McKinnon, J. 2014. JF8 Junee Resurgence—Old line removal and tie-off refurbishment dives, 1 & 10 February 2014, *Speleo Spiel* 402: 4-5.

Here's your 2015 calendar

A NUMBER of the spectacular 2015 calendars are available without having to deal with international money transfers.

This year the donation is to the ASF Karst Conservation Fund. Make a tax-deductible donation of \$30 or more to ASF Karst Conservation Fund and receive a gift calendar for your enjoyment.

Twelve stunning images take you on an enchanting subterranean journey to caves around the world.

The 2015 calendar monthly pages provide a glimpse into the caves of Austria, China, France, Morocco, New Zealand, Puerto Rico, Slovenia, Spain, and the United States.

Make your donation soon and don't miss out on this great gift!

Send your cheque to: C/- Grace Matts, ASF Karst Conservation Fund., 176 William St, Bankstown, NSW, 2200.

FEATURED PHOTOGRAPHERS:

Alexandra Bengel, Germany
Bob Biddix, United States
Dave Bunnell, United States
Philippe Crochet, France
Katharina Daimer, Germany
Kevin Downey, United States
Roberto F. García, Spain
Philippe Guillemin, France
Chris Howes, United Kingdom
Markus Kreuss, Germany
Robbie Shone, United Kingdom
Max Wisshak, Germany

