



Office of
Environment
& Heritage



PERISHER RANGE PROJECTS 2017 - 2018

Project Summary Report for Consultative Committee Meeting

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1 Budget 2017/18

For the 2017/2018 financial year the Perisher Team has an allocated operating budget of \$4.048M (similar to the \$3.962M for 2016/17). The capital funding is in line with the original Treasury allocations and considerably less than the \$309k in 2016/17 with \$13k allocated.

2 Outline of Works

Sewerage

- **Perisher Sewage Treatment Plant process review**

The primary focus of the Perisher Team over winter was dealing with a processing issue at the Perisher Valley Sewage Treatment Plant (STP). The STP operates under a licence from Environment Protection Authority (EPA) with a requirement that effluent ammonia levels do not exceed 2 milligrams per litre at the STP outflow.

Due to unforeseen circumstances, levels of ammonia being discharged to Perisher Creek were in the order of 30 to 40 milligrams per litre following the July school holiday peak visitation period. This resulted in ammonia levels of 3 to 4 milligrams per litre in Perisher Creek immediately downstream from the STP. Perisher Creek runs for another 1.4 km before it reaches an artificial aqueduct that transfers that water to Guthega Dam where it is used for power generation.

EPA were promptly notified of the elevated ammonia and actions that NPWS proposed to rectify the issue were formalised in a Clean-Up Notice issued by the EPA on 21 July 2017. The notice required NPWS to commission the necessary operational resources to return the STP to normal operational performance. To assist in resolving the issue an external company (Simmonds and Bristow) was contracted with a specialist process engineer engaged along with two additional treatment plant operators that were on site from July to September.

Rectification of the issue required a recovery of the biological process and growth of the activated sludge which was a slow process in the alpine environment. Whilst continual improvements were made as the winter progressed the ammonia levels did not return to below licence limits until 5 September 2017.

EPA conducted weekly monitoring of Perisher Creek for nutrients and ecotoxicity and engaged OEH Coastal Wetlands and Coastal Science Branch to undertake a biological assessment of instream macroinvertebrate impacts. The elevated ammonia levels did not pose a risk to public health and the potential environmental impact on Perisher Creek downstream from the STP is being assessed. No formal notification has been received to date regarding any regulatory action EPA may take.

Simmonds and Bristow will be engaged to undertake a full review of the process as well as the feed program so measures can be put in place to prevent a reoccurrence of the issue. Operations staff have also been recently trained on activated sludge and filament identification. This will allow better in-house assessment of sludge quality during the feed program.

- **Reticulation repairs**

The ongoing annual sewer inspection program will continue with the \$65k allocated for investigation of sewer main investigation and repairs. The repair works will again be a number of separate small localised repairs rather than replacement of full sections of sewer line.



STP Sludge \ Biosolids Reuse

South East Waste Recovery will be granted a one year extension to undertake the Perisher STP sludge removal. This will see the biosolids transported to a property near Berridale and direct injected into the ground to improve soil condition. This work will commence over November and December and is expected to cost \$125k.

A new contract for the Perisher STP sludge removal for future years will be tendered prior to winter 2018. This will be for a three year period with two one year options.

Water

- **Water mains**

The small amount of capital funds (\$13k) will be allocated to undertake some improvements on the water reticulation mains to reduce the risk of water hammer and damage to pipes.

Roads

- **Roads maintenance**

Gravel roads maintenance within the Perisher Range Resorts is scheduled to commence in early December. The roads did not suffer significant damage over winter and are in reasonable condition. Contractors will undertake grading and resheeting works where required. If needed they will be engaged again in March/April 2018 to give the roads a final preparation before the winter season. An operating budget of \$80k has been allocated for gravel roads maintenance.

There is also an additional \$25k allocated for asphalt repairs which again will mainly focus on the Ski Tube turning circle area. Whilst the bulk of this work is scheduled in the new year some repairs will be undertaken in November to make the area safe for the L'Etape event on 2 December 2017.

- **Bridge maintenance**

Following the engineering assessment of the internal road bridges in 2017, \$22k has been allocated for repair works. It is planned to also decommission the wooden pedestrian bridge on the south western side of the Skitube terminal as this was found to have significant structural issues.

Waste

- **Organics composting**

With continued support from stakeholders and the amount of organics collected over the 2017 winter season was similar to last year. Approximately 120 tonnes of organics were collected and are currently being processed at Sawpit Creek. Following testing this product will be utilised in the revegetation projects over the upcoming summer. An additional blower will also be installed at the processing site so the aeration system can be expanded to cater for the current volumes.

- **Winter waste collection**

NPWS is proposing to tender the winter waste collection services prior to winter 2018. The preferred contract terms are for a three year period with two one year options. It is hoped this process will provide a more cost effective model for this service.



- **Garbage compactor**

NPWS are currently considering options for the replacement of the Volvo garbage truck/compactor. As replacement was delayed whilst the Governance review was progressing the current vehicle is 12 years old and causing an increased number of electrical/mechanical faults over recent seasons. Lease options are being considered in addition to exploring the possibility of reprofiling the current treasury capital allocations. A replacement vehicle is expected to cost approximately \$390k.

Environment

- **Plants**

Another 4,000 plants are to be planted across the three resort areas in February and March 2018. As per previous years, the planting will be undertaken by both contractors and Perisher Team field officers. Planting will focus on maintaining existing, thickening and replacing losses in previous planting areas.

Heavy rainfall event – 15/16 August 2017

Perisher Valley experienced a heavy rainfall event in mid-August 2017 with 144.6 mm of rain recorded for the 24 hours to 9am 16 August 2017. The heavy rain caused a significant increase in inflows and the STP was operated in storm cycle with excess flows being put through a single treatment tank to minimise impact on the other two tanks as much as possible.

The event was similar rainfall to the 148 mm in 24 hours that occurred in July 2016 but in this instance it primarily occurred overnight when temps were 2 to 4°C rather than around 8°C during the day of last year's event. This resulted in less snowmelt and runoff and prevented the pump station overflows that were experienced in 2016. The total daily inflow into the STP was 4.3 ML which was slightly lower than the record volume of inflow of 4.6 ML from last year's event.