### **CERTIFICATE OF FINDINGS**

### Section 94, Coroners Act 2006

IN THE MATTER of Stephanie Jane SIMPSON

The Secretary, Ministry of Justice, Wellington

As the Coroner conducting the inquiry into the death of the deceased, after considering all the evidence admitted to date for its purposes, and in the light of the purposes stated in section 57 of the Coroners Act 2006, I make the following findings:

Full Name of deceased:	Stephanie Jane SIMPSON
Late of:	264 Lake Hawea-Albert Town Road Albert Town Wanaka
Occupation:	Gardener
Sex:	Female
Date of Birth:	23 July 1987
Place of Death:	Pyke Creek Mount Aspiring National Park Haast Pass New Zealand
Date of Death:	08 February 2020
Cause(s) of Death	
(a). Direct cause:	Drowning
(b). Antecedent cause (if known):	Blunt force trauma (ribs, lumbar spine, left and right ankles)
(c). Underlying condition (if known):	
(d). Other significant conditions contributing to death, but not related to disease or condition causing it (if known):	

### Circumstances of death:

The circumstances of Ms Stephanie Jane Simpson's death are set out in my written findings dated 23 May 2023.

#### **Restriction on publication:**

Pursuant to s 74 of the Act, I make an order prohibiting the publication of photographs of Stephanie Simpson taken during the investigation into her death. I am satisfied that it is in the interests of decency and personal privacy that such photographs should not be published and that there is little public interest in such photographs being published. An infringement of the principle of freedom of expression is justified.

Those findings, and my reasons for making them, are also set out in my written findings dated 23 May 2023.

Signed at Auckland on 23rd day of May 2023.

### THIS FINDING IS SUBJECT TO PROHIBITIONS AND RESTRICTIONS ON PUBLICATION UNDER SECTION 74 OF THE CORONERS ACT 2006

## IN THE CORONERS COURT AT DUNEDIN (IN CHAMBERS)

CSU-2020-DUN-63

## I TE KŌTI KAITIROTIRO MATEWHAWHATI KI ŌTEPOTI (I TE TARI)

## UNDER THE

Coroners Act 2006

IN THE MATTER OF

An inquiry into the death of Stephanie Jane SIMPSON

Date of Findings: 23 May 2023

# FINDINGS OF CORONER HO

[1] On 8 February 2020 Stephanie Simpson, aged 32, went missing while on a day tramp in Mount Aspiring National Park. Her body was found in a gorge several days later. A coronial inquiry was opened.

## Issues

[2] The issues to be determined by this inquiry are the cause and circumstances of Stephanie's death.

## Background

[3] Stephanie was a British national who arrived in New Zealand on a work visa in October 2019. She worked in Wanaka as a landscape gardener. She was known to be extremely fit with no known medical issues. Police enquiries indicated she was an experienced tramper.

[4] On 7 February 2020 Stephanie drove on her own to the Blue Pools, about 72 kilometres north of (one hour drive from) Wanaka. She spent the night in her car at the Blue Pools Carpark. The next morning she travelled a further 13 kilometres (10 minutes) to the Fantail Falls carpark. As well as providing access to the nearby Fantail Falls, the carpark marks the start of the Brewster Track, which leads up to Brewster Hut in Mount Aspiring National Park.

[5] The Brewster Track is managed by the Department of Conservation (DOC) and is classified as an advanced tramping track. It climbs 980 metres in 3.1 kilometres. The first two thirds of the track is an unformed but well-marked path through beech forest. At an altitude of 1,140 metres the track leaves the bush line and follows a narrow ridge to Brewster Hut, which sits at 1,440 metres above sea level.

[6] Stephanie was wearing a Garmin GPS watch. Data recovered from the watch showed that Stephanie began walking up to the Brewster Hut at 10.39 am via the track. Her watch shows that she reached Brewster Hut at approximately 12.34 pm, 1 hour and 55 minutes after she started. The usual time allowed by DOC to complete the track is 3 hours. DOC indicated that Stephanie may have been trail running the track rather than tramping it.

[7] There are two common objectives for those who reach Brewster Hut. One is to continue east up to Mount Armstrong and the other is to head to the foot of the Brewster Glacier. The most common access to the Brewster Glacier branches from the Mount Armstrong access at an altitude of about 1,700 metres.

[8] There is no maintained access beyond Brewster Hut. There are some unofficial and unmaintained rock cairns left by members of the public to provide a basic guide to the summit of Mount Armstrong. The access to the glacier is even more elementary in that there is not even any discernible path from regular use.

[9] Stephanie's Garmin watch showed that she had a 26 minute break at Brewster Hut and left in the direction of Mount Armstrong at 1.09 pm. However, rather than continuing up to the summit of Mount Armstrong, Stephanie began to contour towards the Brewster Glacier at about 1,700 metres' altitude. She eventually turned around before reaching Brewster Glacier but did not take the exact same route back. Instead, she was drawn down in the steep upper headwall of Pyke Creek and dropped down into the valley. The image below shows Stephanie's route after leaving Brewster Hut (bottom left, green symbol):



[10] Stephanie's pace slowed considerably once in the valley. She continued down into the creek's gorge. Her watch indicated she was in the gorge area for roughly two hours when, at 6.05 pm, her watch stopped tracking. The reason for this is unknown but could include her watch being turned off, running out of battery, losing signal or being submerged in water.

[11] At some point following, with her watch no longer recording, Stephanie made her way further down the valley. Her boots were found neatly placed about 10 metres from the creek edge, approximately 750 metres from where her GPS tracking ended. It is unknown why Stephanie removed her boots although the fact they were dry and neatly placed indicate she was still alive and not in significant trouble at this point.

[12] A pair of trampers who Stephanie had encountered on Brewster Track contacted police on the evening of 9 February after noticing that her car was still parked at Fantail Falls. Stephanie's employer called police on 10 February after she did not turn up to work. A search and rescue operation began on 11 February.

[13] On the morning of 14 February Stephanie's pack was located by a helicopter search crew approximately 900 metres downstream from her boots. A specialist canyon rescue team was sent into the location. They found Stephanie's body submerged in swift running white water, approximately 1.5 metres below the surface, in a steep sided gorge in Pyke Creek. The location was approximately 1.5 kilometres from where her Garmin

watch last showed her location and approximately 800 metres downstream from where her boots had been neatly placed.

## **Cause of death**

[14] Pathologist Dr Leonard Wakefield conducted a post-mortem examination. He observed facial abrasions, abrasions and bruising on the forearms and elbows, and abrasions over lower limbs consistent with water/gravel erosion. There was bruising on the hip and bruises on the thigh with associated skin erosions. There was an open fracture and dislocation of the left ankle with avulsion of the distal ends of both tibia and fibula. There was a closed fracture of the right ankle.

[15] Autopsy identified a frothy plume within the trachea and major airways. Both lungs were oedematous.

[16] Stephanie's blood and urine were analysed. Acetone was identified in Stephanie's urine, but not her blood, at an approximate level of 20 milligrams per litre. Blood acetone levels are usually lower than 10 milligrams per litre in healthy individuals. The ESR scientist who conducted the toxicology analysis explained that the apparent discrepancy between the blood and urine readings was because acetone stays unchanged in the urine whereas it can fall back to normal levels in the blood. Dr Wakefield opined that the raised urinary acetone levels indicated the possibility of antemortem hypothermia.

[17] Dr Wakefield concluded that Stephanie died from drowning occurring in the context of severe blunt force trauma.

[18] I accept Dr Wakefield's opinion.

### What happened?

[19] The Mountain Safety Council New Zealand (MSC) is a national organisation with a mandate to encourage safe participation in land based outdoor activities. Tom Harris and Mark Austin of the MSC provided expert evidence to my inquiry in relation to Stephanie's death. Messrs Harris and Austin are both experienced outdoors guides who are familiar with the Brewster Track and the surrounding areas. [20] The data from Stephanie's GPS watch, and the inference which can be drawn from the neat placement of her boots upstream from where her body was found, provides general evidence of Stephanie's movements on 8 February. However, they do not explain why she came to be in the Pyke Creek gorge. The MSC report writers posited several possible reasons, including a conscious decision to explore Pyke Creek, with either the intention to climb back up to Brewster Track or continue to navigate down the gorge to Fantail Falls; navigation error; or medical condition or injury which affected her cognitive reasoning ability.

[21] The MSC report noted three challenges which Stephanie would have faced on her journey.

#### Navigational errors and environmental challenges

[22] Stephanie's GPS data shows that, whatever the reason that led to her deviating from the Mount Armstrong track and towards Brewster Glacier, she made a conscious decision to backtrack before reaching the glacier. For unknown reasons Stephanie did not follow the same route back to the Mount Armstrong track. Her GPS watch had a return function which could have provided instructions for Stephanie to return on the same route, although it is unknown whether she was aware of this feature.

[23] The MSC report writers noted that the area where Stephanie backtracked is challenging. The terrain is steep and there is no official track or marked route. The ground is undulating and navigation is complicated by the surrounding bluffs. Further, while low lying cloud began to lift around midday on 8 February, a witness who ascended Mount Armstrong in the afternoon reported that there continued to be cloud at around 2,000 metres, which could have obscured notable reference points for Stephanie. The report writers considered that it would be difficult to travel through this area without suitable experience or familiarity.

[24] Stephanie's GPS watch showed she was in the gorge area for approximately two hours before her watch stopped recording. The report writers noted this could either mean she was stuck and struggling to get out, or that she was resting or taking a break.

[25] Stephanie had indicated to several people that she did not plan to spend the night at the hut, suggesting she was likely planning a day trip. The report writers considered the

possibility that she intentionally headed down Pyke Creek as an alternate route back to her car. However, they noted this would be an unusual choice for someone of Stephanie's reported level of outdoors experience, given the difficult nature of the terrain and the generally accepted principle that travel on track is almost always faster than finding a new way off track.

#### Fatigue and hypothermia

[26] The MSC report writers noted that Stephanie had a fairly big day heading up to Brewster Hut and subsequently climbing some way towards Mount Armstrong and then contouring towards the Brewster Glacier. The terrain above Brewster Hut is much steeper and rougher than the terrain leading up to it and there is no well-defined track, making travel and navigation more challenging and taxing. Being tired after an effort such as this can lead people to make judgement or navigational errors, attempt shortcuts, or rush to get back. However, several statements provided to my inquiry referred to Stephanie's tramping experience and strong fitness levels. The fact that she completed the Brewster Track in less than two hours, against the generally accepted three, shows a reasonably strong fitness level. Messrs Harris and Austin also observed that Stephanie's pack contained food and water so it was unlikely she was significantly dehydrated or lacking in available food energy.

[27] The report writers considered the possibility that Stephanie had hypothermia, which could have affected her cognitive judgement. However, the weather was dry and not particularly windy or cold. Stephanie was dressed in sufficiently warm layers for the time of year. They considered it unlikely.

[28] The elevated levels of acetone in post-mortem toxicology indicated the possibility of hypothermia while Stephanie was alive. However, there is no evidence that any hypothermia was the cause of Stephanie getting into difficulty rather than the result of it. Given the weather conditions reported I consider it more likely that any ante-mortem hypothermia developed towards the end of Stephanie's journey, most likely while she was in the gorge and possibly while she was in the water, rather than before.

#### Slip or fall

[29] Stephanie's GPS watch records that at some point between 1 hour 48 minutes and 2 hours 16 minutes after leaving Brewster Hut, she attained a top speed of 4 minutes 38 seconds per kilometre (equivalent to 12.9 kilometres per hour). Senior Constable Jason McDonald, who was in charge of investigating Stephanie's death and who is personally familiar with Garmin GPS tracking, gave evidence that this was a near sprint pace. He said that the terrain above Brewster Hut would not permit a controlled run down any ridge or hill. He surmised that the reason for the high speed reading was because Stephanie had slid or fallen down a steep section of slope or scree slide.

[30] Unfortunately, the GPS data does not assist in determining the effect of this fall. The data for the same period records an elevation gain of 59 metres and an elevation loss of 224 metres. However, the pace and elevation data for the subsequent periods, which runs up to 4 hours 56 minutes after leaving Brewster Hut, show elevation gains of between 45 and 249 metres and elevation losses of 61 to 263 metres, as well as paces ranging from 9 minutes 49 seconds per kilometre (6.1 kilometres per hour) to 14 minutes 24 seconds (4.2 kilometres per hour). Senior Constable McDonald noted that the fluctuating data could indicate Stephanie attempting to exit the gorge or could be because her watch was struggling to connect to the GPS to get a reading. However, irrespective of the reason for the fluctuating data, it does not appear that the fall that occurred around the two hour mark hampered Stephanie's ability to keep moving.

[31] The post-mortem examination showed that Stephanie had sustained injuries consistent with a fall. It is not possible to determine whether there was more than one fall or when such fall(s) occurred, or the effect of such fall(s) on Stephanie's decision making.

[32] Senior Constable McDonald and the MSC report writers both separately posited a scenario whereby Stephanie slipped or tripped into the water and drowned as being most likely. I agree. However, there was insufficient evidence before me to determine the precise sequence of events that led to that outcome and whether she fell into the water at the location where she left her boots, the location where she was found, or somewhere in between.

[33] Stephanie was found with her socks on. This suggests it is more likely that she fell into the water at or near where her boots were placed. However, this still does not provide an explanation of why she came to be in the water or in a position where she was able to fall into the water at that location. One possible explanation is that after being in the gorge for some time, and having walked for much of the day, Stephanie stopped to rest and took her boots off to relieve pressure on her feet. After resting she may then have decided to approach the water, perhaps to bathe her feet in the water or to wash, and chose to traverse the 10 metres or so from her resting spot to the creek bank in her socks rather than put her boots back on. At the creek edge she may then have slipped on or tripped over a rock, possibly in declining daylight, and fell into the water where she was knocked unconscious and swept downstream.

### Fact findings

[34] The standard of proof that applies in the coronial jurisdiction is the civil standard of balance of probabilities. In determining whether something is more likely than not, common sense requires the decision maker to consider the inherent probability of that event occurring.<sup>1</sup> Applying that legal test, I make the following fact findings:

- (a) For unknown reasons Stephanie entered the Pyke Creek gorge after departing from Brewster Hut in the direction of Mount Armstrong.
- (b) After about two hours in the gorge Stephanie's GPS stopped recording.
- (c) Stephanie stopped to rest about 750 metres downstream from when her GPS stopped recording. She removed her boots and left them neatly about 10 metres away from the creek edge.
- (d) The section of Pyke Creek where Stephanie was found consists of swift moving white water.
- (e) For unknown reasons, Stephanie subsequently approached the creek in her socks and involuntarily entered the water, likely as the result of a trip or fall.

<sup>&</sup>lt;sup>1</sup> Braganza v BP Shipping Ltd [2015] UKSC 17, [2015] 4 All ER 639 at [33]-[35].

(f) Stephanie drowned as a result.

### Findings

[35] I find that Stephanie Jane Simpson died on 8 February 2020 at Pyke Creek in Mount Aspiring National Park from drowning occurring in the context of severe blunt force trauma. The manner of death was accident.

#### **Recommendations and comments**

[36] I make the following comments or recommendations under s 57A of the Act for the purpose of preventing future deaths in similar circumstances.

#### Department of Conservation investigation

[37] After Stephanie's death DOC reviewed its communications and policies about the Brewster Hut area. While DOC does not promote or maintain facilities, including tracks, beyond Brewster Hut, DOC identified some factors which could have led visitors like Stephanie into believing that the area was more controlled than it was. This included the use of the word "track" in a DOC brochure to describe the access through the rocky terrain above Brewster Hut and an information panel in Brewster Hut providing guidance on how to access Mount Armstrong.

[38] DOC made several internal recommendations to update its visitor information, including on-site hazard signage, to ensure that Brewster Hut and its surrounding access was managed for the appropriate visitor group. Andy Roberts, DOC's Visitor Safety Manager, gave evidence shortly after Stephanie's death that while the Brewster Track is managed for "backcountry adventurers" (who are expected to have generally moderate to high backcountry skills and experience and who DOC classifies as having the second highest level of risk tolerance), the area above Brewster Hut, including the unmarked and informal access route from the hut to Mount Armstrong, is designed for "remoteness seekers". DOC classifies remoteness seekers as having the highest level of risk tolerance and who have strong backcountry skills and experience.

[39] Mr Roberts also identified that the growth of social media has led to more visitors with less experience and skills than recommended to undertake a particular access, thus

increasing the risk of serious or fatal consequences to them. In particular, he noted that DOC has been concerned that the Brewster Track had been increasingly attracting people with a lower risk tolerance and skill ability than was ideal.

[40] At the close of my inquiry Nicholas Sutcliffe, Mr Roberts' successor, provided an update on the work that DOC had done since Stephanie's death. Mr Sutcliffe stated that DOC's website and on-site safety information for the Brewster Track had been reviewed and updated. As to the latter, there is now a warning sign in Brewster Hut informing visitors that the area beyond the hut can be hazardous and that there is no hazard management or visitor infrastructure. Mr Sutcliffe advised that DOC also continues to monitor the evolving profile of visitors and changes in the way they use the site; and continues to evaluate and refine its management to ensure that it remains fit for purpose.

[41] I cannot say whether, if the warning signs there today had been there in 2020, Stephanie would have been dissuaded from moving beyond Brewster Hut. The evidence was that she was an experienced tramper with a strong level of fitness. It may have been that such changes would have made no difference to the eventual outcome for Stephanie. However, any improvements to communication messages about the difficulty level of the track and access around the Brewster Hut, and which make clear that there is no marked or maintained access beyond Brewster Hut, can only be beneficial to visitors.

#### Mountain Safety Council advice

[42] In addition to the issues around navigation and weather identified above, the MSC report writers noted two further factors which might have contributed to Stephanie's death. First, Stephanie did not appear to have a distress beacon which she could have activated for help. Second, Stephanie was walking alone, increasing the risk of not being able to seek timely help if she got into difficulty.

[43] The MSC encourages all recreating in the backcountry to consider the following:

(a) Choose the right trip for you. Make sure your experience level matches your objective and that you are well prepared for your trip. Tramping offtrack requires experience and skills, especially in terrain such as the area towards the Brewster Glacier. Make sure objectives like this sit within your comfort zone, particularly if venturing alone.

- (b) Understand the weather. Be prepared to change your plans due to the hazards which weather can bring. This does not just mean be prepared for rain or snow; warm and humid conditions can also be hazardous, and cloud cover can affect visibility, leading to navigational challenges. When changing your plan, weigh up the risks that may be involved in the new plan, particularly if it involves going off track.
- (c) Pack warm clothes, extra food and a backup means of navigation. Maps on phones or watches are excellent for getting around terrain, but it's important to have a backup in the event the primary method is unusable. A protected paper map and compass are typically most reliable because they do not need batteries or electronic signal.
- (d) Carry emergency equipment such as a first aid kit that includes a survival blanket and an emergency shelter, especially when heading above the bush line.
- (e) Share your plans. Leaving detailed information about an itinerary with a trusted contact will allow search and rescue teams to be activated and reach the location sooner. Online resources such as planmywalk.nz offer an easy way to do this. It is also useful to leave clear intentions in hut books, even if not staying there overnight, to narrow down search parameters and provide hut occupants a reference point when concerned about a person's plans or whereabouts.
- (f) Take ways to get help. All trampers should carry a distress beacon (either satellite messenger or Personal Locator Beacon) and particularly when intending to travel in remote areas with no cell coverage.
- (g) Take care of yourself and each other. Focus must be maintained throughout your trip, particularly when off-track. Pacing, route-finding and other techniques may have to adjust to being physically and mentally tired. Paying attention to where you have come from can greatly assist if needing to backtrack.

[44] The MSC report writers also stated that extra emphasis should be placed on the above guidance when tramping solo. Margins for error in relation to the ability to call for help, self-evacuation, self-monitoring and decision making are smaller when tramping solo. The MSC recommends in terrain such as that around Brewster Hut and Mount Armstrong that trampers travel in small groups where possible.

[45] These safety messages are already well publicised in New Zealand through a variety of sources. However, they bear repeating and emphasising. They may also not be well known to international tourists. For that reason, it is useful to publish them as coronial recommendations so that they reach as wide an audience as possible.

#### **Restrictions on publication**

[46] Pursuant to s 74 of the Act, I make an order prohibiting the publication of photographs of Stephanie Simpson taken during the investigation into her death. I am satisfied that it is in the interests of decency and personal privacy that such photographs should not be published and that there is little public interest in such photographs being published. An infringement of the principle of freedom of expression is justified.<sup>2</sup>

#### **Procedural matters**

[47] These findings are issued pursuant to a determination I made under s 80 of the Act to hold a hearing on the papers rather than an inquest. The s 77 requirements that apply to such a hearing have been satisfied.

[48] I have made, pursuant to s 57A, recommendations and comments in these findings. The s 57B requirements that apply to notification of these recommendations and comments have been satisfied.

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<sup>&</sup>lt;sup>2</sup> Gravatt v The Coroners Court at Auckland & ano'r [2013] NZHC 390.