

SHERIFFDOM OF TAYSIDE, CENTRAL AND FIFE AT FALKIRK

[2026] FAI 55

FAL-B266-25

DETERMINATION

BY

SHERIFF KEITH O'MAHONY

**UNDER THE INQUIRIES INTO FATAL ACCIDENTS AND SUDDEN DEATHS ETC
(SCOTLAND) ACT 2016**

into the death of

KAYDEN WALKER

and

RUARIDH STEVENSON

Falkirk, 21 October 2026

Contents

PART I – STATUTORY FINDINGS

A.	Findings in Relation to Kayden Walker	3
B.	Findings in Relation to Ruaridh Stevenson	8

NOTE.

A.	Introduction	14
B.	The Inquiry	15
C.	Legal Framework	20

PART II – KAYDEN WALKER

A.	Background	23
B.	Riverboarding at Stanley	26
C.	The Events of 28 July 2019	28
D.	Cause and Mechanism of the Accident	36
E.	Material Issues – Kayden Walker	37

PART III - RUARIDH STEVENSON

A.	Background	63
B.	Canyoning and Dollar Glen	65
C.	Weather and Water Conditions	68
D.	The Events of 13 April 2024	69
E.	Cause and Mechanism of the Accident	73
F.	Material Issues – Ruaridh Stevenson	74

PART I – STATUTORY FINDINGS

A. Findings in relation to Kayden Walker:

The sheriff, having considered the evidence presented at the inquiry, determines in terms of section 26 of the Inquiries into Fatal Accidents and Sudden Deaths Etc (Scotland) Act 2016 (“the 2016 Act”) as follows:

1. Section 26(2)(a) — when and where the death occurred:

Kayden Walker, born 16 January 2007, died at 1510 hours on 29 July 2019 at the Royal Hospital for Sick Children, Glasgow.

2. Section 26(2)(b) — when and where the accident resulting in the death occurred:

The accident resulting in Kayden Walker’s death occurred at about 1318 hours on 28 July 2019 on the River Tay at Stanley, Perthshire, at or immediately adjacent to the feature known as Stanley Weir, while he was participating in an organised riverboarding activity.

3. Section 26(2)(c) — the cause or causes of the death:

The cause of death was:

1a. Hypoxic/ischaemic brain damage

due to

1b. Drowning.

4. Section 26(2)(d) — the cause or causes of the accident resulting in the death:

While negotiating Stanley Weir, Kayden became separated from his riverboard and became entrapped beneath the water at or immediately adjacent to the breached weir.

He was held submerged by the entrapment and the force of the flowing water.

The precise underwater object, material or feature which caused the entrapment cannot be identified on the evidence.

Kayden's limited swimming ability was relevant to the assessment and management of risk but has not been established to have caused or contributed to the accident.

5. Section 26(2)(e) — precautions which (i) could reasonably have been taken and (ii) which, had they been taken, might realistically have resulted in the death or accident being avoided:

i. The group could have exited the river upstream of Stanley Weir and portaged the feature by use of the adjacent riverbank route before re-entering the river downstream. That precaution would have avoided exposing Kayden to the entrapment hazard at the weir.

ii. While participants negotiated Stanley Weir, one instructor could have remained above the feature and one instructor remained below it until every participant had safely passed through. That precaution might realistically have avoided the accident by enabling Kayden's approach to the feature to be controlled from upstream and providing immediate supervision and rescue cover on both sides of the hazard.

6. Section 26(2)(f) — defects in any system of working which contributed to the death or accident resulting in the death:

- i. The written risk assessment used by Outdoor Pursuits Ltd was not suitable and sufficient in respect of Stanley Weir. It did not adequately identify and assess the risk of body or limb entrapment presented by that feature and did not translate that hazard into an appropriate site-specific method of work.
- ii. The system of working used by Outdoor Pursuits Ltd did not require and ensure that one instructor remained above Stanley Weir and one instructor below it until all participants had safely negotiated the feature. Both instructors had passed downstream before Kayden, the final participant, entered the feature.

No defect which contributed to the accident or death has been established in relation to:

- the instructor-to-participant ratio;
- the risk assessment or systems of Church House;
- communication of Kayden's swimming ability;
- the equipment supplied to Kayden;
- the pre-activity safety briefing or familiarisation; or
- the rescue, emergency response or subsequent medical care.

7. Section 26(2)(g) — any other facts relevant to the circumstances of the death:

The following facts are relevant to the circumstances of Kayden's death:

- i. Kayden's limited swimming ability was known to Church House and to those responsible for delivering the riverboarding activity at Outdoor Pursuits Ltd. The issue was not a failure to communicate that information, but the judgment made as to what precautions, if any, it required.
- ii. The equipment supplied to Kayden was not shown to be defective or causative of his death.
- iii. The safety briefing and familiarisation undertaken before departure were adequate for the activity.
- iv. The instructor-to-participant ratio was not, in itself, shown to have contributed to the accident.
- v. Once the emergency was identified, all that reasonably could be done to rescue and resuscitate Kayden, was done. Callum Gracie acted promptly and did all that he could to effect rescue, including submerging himself in the hazardous flow in an effort to free Kayden. The subsequent actions of the other adults present, emergency services, air ambulance personnel and hospital clinicians were prompt and appropriate.
- vi. Riverboarding was not a licensable activity under the Adventure Activities Licensing Authority ("AALA") regime in July 2019. The absence of AALA licensing has not been shown to have caused or contributed to Kayden's death.

RECOMMENDATIONS

8. In terms of section 26(1)(b) of the 2016 Act (recommendations (if any) as to (a) the taking of reasonable precautions, (b) the making of improvements to any system of working, (c) the introduction of a system of working, (d) the taking of any other steps, which might realistically prevent other deaths in similar circumstances), the following recommendations are made:

- i. The Health and Safety Executive, in conjunction with the Adventure Activities Licensing Authority and such government department or departments as may be appropriate, should undertake a formal review of whether commercially provided riverboarding for persons under the age of 18 should fall within the Adventure Activities Licensing regime. That review should consider whether riverboarding may properly be brought within the existing statutory definitions or whether legislative amendment is required.
- ii. Pending the outcome of that review, the Health and Safety Executive consider issuing specific guidance to providers of riverboarding activities, and to organisations commissioning such activities for children, making clear that riverboarding falls outside the AALA licensing regime. Such guidance should emphasise the need for appropriate and rigorous risk assessment of site-specific hazards by all organisations involved in organising events of this nature.

These recommendations are not founded upon a conclusion that AALA licensing would have prevented Kayden Walker's death. They are made because the evidence disclosed a potentially high-risk commercial adventure activity involving children which

presently sits outside an established system of independent scrutiny. Reconsideration of that regulatory position may assist in preventing deaths in similar circumstances.

B. Findings in relation to Ruaridh Stevenson:

The sheriff, having considered the evidence presented at the inquiry, determines in terms of the 2016 Act as follows:

1. Section 26(2)(a) — when and where the death occurred:

Ruaridh Stevenson, born 22 September 1984, died at 1144 hours on 13 April 2024 at the feature known as the Witches Cauldron or the Devil’s Cauldron (“the cauldron”) within Dollar Glen, Clackmannanshire.

2. Section 26(2)(b) — when and where any accident resulting in the death occurred:

The accident resulting in Mr Stevenson’s death occurred on the morning of 13 April 2024 within Dollar Glen, Clackmannanshire, while he was guiding a commercial canyoning excursion involving two sisters, Lucy and Jessica Pringle.

Mr Stevenson entered the plunge pool to assist Jessica Pringle after she had become caught in the turbulent water beneath the waterfall. He thereafter became caught within the recirculating hydraulic and was repeatedly submerged.

3. Section 26(2)(c) — the cause or causes of the death:

The cause of death was:

1(a) Drowning.

4. Section 26(2)(d) — the cause or causes of any accident resulting in the death:

The accident was caused by Mr Stevenson entering the cauldron to rescue Jessica Pringle and becoming caught and overwhelmed within the powerful water conditions then present in the plunge pool.

The volume and energy of water entering the cauldron were substantially elevated following a period of heavy rainfall. The resulting flow produced turbulent, highly aerated and recirculating water. Mr Stevenson became trapped within that recirculation, was repeatedly submerged and was unable to escape before losing consciousness and drowning.

5. Section 26(2)(e) — precautions which could reasonably have been taken and which, had they been taken, might realistically have resulted in the death, or any accident resulting in the death, being avoided:

i. Given the prevailing conditions on the 13 April 2024 a reasonable precaution would have been not to proceed with the excursion through the cauldron. The excursion could have been postponed, relocated to another suitable venue, or conducted by a route which omitted the cauldron. The volume and energy of water entering the plunge pool had materially increased the aeration and recirculating hydraulic within it.

Avoidance of the feature would have avoided the circumstances in which Jessica Pringle and thereafter Mr Stevenson became caught in that hydraulic.

ii. In the specific circumstances of that day, where the water flow was considerably heightened beyond its usual level, an effective bank-based rescue aid or equivalent pre-rigged rescue system could have been positioned and made immediately available before participants entered the cauldron. Such a precaution might have included a reach pole or a throw line from a pre-rigged rope arrangement. Had such a precaution been taken, it might realistically have enabled Jessica Pringle to be assisted without Mr Stevenson having to enter the water. Such a system may also have provided an external means of support for extraction to Mr Stevenson once he entered the water.

6. Section 26(2)(f) — defects in any system of working which contributed to the death or any accident resulting in the death:

i. There was a defect in Adventure Logic Ltd's system of working in that its risk assessment and operating arrangements did not adequately address, in a site-specific manner, the changing hydraulic risk presented by the cauldron as water levels increased. It was insufficient simply to recognise, at a generic level, the hazards associated with water activities. The risk presented by the cauldron changes with the changing volume and energy of the water flow. Increasing flow altered the aeration levels and the strength of the recirculating hydraulic, thereby reducing the prospect of self-rescue. A suitable system required those matters to be addressed specifically and operationally.

7. Section 26(2)(g) — any other facts which are relevant to the circumstances of the death:

The following facts are relevant to the circumstances of Mr Stevenson's death:

- i. Mr Stevenson was an experienced and qualified canyoning guide who was familiar with Dollar Glen. He had attended the Glen on 12 April 2024, following several days of heavy rainfall, to assess the conditions.
- ii. Benjamin Case, an experienced canyoning instructor with substantial knowledge of Dollar Glen, independently attended the Glen on 12 April 2024. On that date, he assessed the water as being at or near an unsafe level and did not take his group of experienced canyoning instructors into the canyon.
- iii. Once a person becomes caught within the recirculating hydraulic then present in the cauldron self-rescue is highly unlikely, even for an experienced individual.
- iv. Mr Stevenson was operating as the sole guide for two clients. Solo guiding is not, of itself, inappropriate as a general practice. I do not find that the absence of a second guide is shown to have contributed causally to the accident or death.
- v. The excursion was not subject to the Adventure Activities Licensing Authority regime because it was being provided to adult participants. There was no requirement for Adventure Logic Ltd's risk assessment, standard operating procedures, water level criteria or guiding arrangements to be submitted to AALA or any equivalent statutory body for prior approval. I am not satisfied that the absence of external regulation or

technical oversight can itself be said to have caused or contributed to Mr Stevenson's death.

vi. There was no warning signage at the cauldron specifically addressing the danger of aerated or recirculating water. I am not satisfied that the absence of such signage contributed to this accident or that signage would realistically have altered Mr Stevenson's decision to proceed. No finding adverse to the National Trust for Scotland arises from the absence of signage.

RECOMMENDATIONS

8. In terms of section 26(1)(b) of the 2016 Act (recommendations (if any) as to (a) the taking of reasonable precautions, (b) the making of improvements to any system of working, (c) the introduction of a system of working, (d) the taking of any other steps, which might realistically prevent other deaths in similar circumstances), the following recommendations are made:

Industry wide recommendations

i. The Health and Safety Executive and the UK Canyoning Association should consider producing or developing guidance for commercial canyoning providers addressing site-specific risk assessments, standard operating procedures, and operational water level limits and cutoff criteria. Such guidance should identify the importance of defining the circumstances in which an individual feature should not be used.

ii. The Health and Safety Executive and the UK Canyoning Association should consider whether commercial canyoning providers should be expected to obtain periodic independent technical review of their venue specific risk assessments, standard operating procedures and operational water level limits. Any such review should be undertaken by persons with canyoning specific technical competence. The purpose of independent review would be to provide an objective check upon the provider's own systems and reduce the risk of confirmation bias.

Cauldron specific recommendations

iii. The UK Canyoning Association, in consultation with the National Trust for Scotland, should identify an existing fixed feature or, if necessary, install a suitable water level marker at or near the cauldron from which water levels can be assessed. That would provide a common and objective reference point against which commercial providers can establish and apply water limit cut-off points.

iv. Commercial canyoning providers operating at Dollar Glen should incorporate within their risk assessments a venue specific method for assessing water conditions. That system should stipulate an identifiable cut-off point beyond which the cauldron will not be accessed.

v. The National Trust for Scotland, in consultation with the local authority as necessary, should arrange for a suitably positioned warning sign to be erected at or close to the cauldron. The signage should draw attention not merely to a general risk of drowning but to the particular danger which can be created by highly aerated and

recirculating water within that specific pool and to the increased danger following periods of heavy rainfall. This recommendation is not based upon any finding that the absence of signage contributed to Mr Stevenson's death. It is made prospectively because the cauldron is accessible to the public, has been used informally by adults and children, and presents a serious hydrological danger which may not be apparent to an inexperienced person.

NOTE.

A. Introduction

Background

[1] These conjoined fatal accident inquiries concern the deaths of two people in separate accidents almost 5 years apart. Each death occurred during an organised water-based activity in Scotland. Kayden Walker was 12 years old. He suffered fatal injury during a riverboarding excursion on the River Tay at Stanley, Perthshire on 28 July 2019. Ruaridh Stevenson was 39 years old. He died while leading a commercial canyoning excursion at Dollar Glen, Clackmannanshire on 13 April 2024.

[2] Kayden died after sustaining hypoxic/ischaemic brain damage due to drowning. Ruaridh Stevenson died from drowning. These conjoined inquiries were held to answer the statutory questions about the accidents which resulted in the deaths, the precautions which might realistically have avoided them, any defects in systems of working, and any other relevant facts.

[3] In relation to each death, the activities, the participants, locations, hazards and organisational arrangements were different. However, there are overlapping issues. These include the dangers of adventurous water activities, safety management, rescue strategy, risk assessment and the regulatory environment.

Structure of the Determination

[4] Part I summarises the statutory findings of the inquiry. Part II concerns Kayden. It describes Church House, Outdoor Pursuits Ltd, riverboarding at Stanley, the weir, the chronology and the evidence bearing upon the mechanism of the accident. Part III performs the same function for Mr Stevenson, Adventure Logic Ltd, Dollar Glen and the cauldron.

B. The inquiry

Procedural history

[5] The Crown Office and Procurator Fiscal Service first lodged notice of the inquiry on 18 July 2025. Preliminary hearings were held on 2 September 2025, 17 November 2025 and 16 February 2026. Evidence was led on 16, 17, 18, 19, 20, 23, 24, 26 and 27 March 2026. On Wednesday 25 March 2026, the inquiry, together with the various legal representatives, visited the locations of both accidents to obtain a fuller understanding of the events themselves. A hearing on submissions was held on 1 June 2026.

Participants

[6] The following parties participated:

<u>Party</u>	<u>Representative</u>
COPFS	Fraser, Procurator Fiscal Depute
Church House	Smith, KC
Philip Robinson	Doran, Advocate
National Trust for Scotland	Railton, solicitor

Witnesses

[7] The following witnesses gave evidence:

<u>Name</u>	<u>Capacity</u>	<u>Relevant Inquiry</u>	<u>Date</u>
Angela Malloy	Former employee of Church House	Kayden Walker	16/3/26
Graham Hyndman	Employee at Church House	Kayden Walker	16/3/26
Katarina Pearson	Environmental Health Inspector	Kayden Walker	17/3/26
Laura Livingstone	Countryside Ranger	Ruaridh Stevenson	17/3/26
Peter Carroll	Assistant Ranger	Ruaridh Stevenson	17/3/26
Frances Kelly	Senior Policy Advisor with the HSE	Both	18/3/26

Tim Davis	CEO of TrollAktiv Drift AS	Both	19/3/26
Alison Gilderoy	Step-Grandmother of Lucy Pringle	Ruaridh Stevenson	20/3/26
Lucy Pringle	Client of Ruaridh Stevenson	Ruaridh Stevenson	20/3/26
Benjamin Case	Outdoor Instructor	Ruaridh Stevenson	23/3/26
George Yates	UK Canyoning Association	Ruaridh Stevenson	23/3/26
Philip Robinson	Former owner of Outdoor Pursuits Ltd	Kayden Walker	24/3/26
Robert Litherland	Rescue 3 Europe Instructor Trainer	Kayden Walker	26/3/26

Joint minute

[8] A substantial joint minute of agreement was lodged. It agreed personal details, chronologies, emergency responses, causes of death, the provenance of many productions and certain aspects of the subsequent investigations. That agreement was extremely helpful to the inquiry and had the effect of substantially narrowing the matters for analysis.

Expert evidence

[9] The inquiry heard evidence from a number of people who are to be regarded as expert in their various fields. The inquiry is greatly indebted to them for their assistance. Under noted is a brief background of each expert witness.

[10] Katarina Pearson is an environmental health officer with Perth and Kinross Council and an authorised officer under section 19 of the Health and Safety at Work etc. Act 1974. She holds a master's degree and a diploma in environmental health and had worked for the council since December 2016.

[11] Frances Kelly is a senior policy adviser and inspector with the Health and Safety Executive, and at the time of the inquiry was the contract manager for the Adventure Activities Licensing Authority. She joined the Health and Safety Executive in 2001 as a trainee inspector and has been involved with AALA, to varying degrees, since 2016.

[12] Tim Davis is the owner and manager of TrollAktiv Drift AS, an outdoor adventure tourism business in Norway with a particular focus on whitewater activities. He has more than 20 years' experience of commercial riverboarding. He holds qualifications and has experience in activities including kayaking, skiing, first aid and whitewater rescue.

[13] Benjamin Case has been involved in outdoor pursuits for almost 20 years. Before establishing his own business, he worked as an outdoor and leadership instructor at Raasay Outdoor Centre. In 2015 he co-founded The Canyoning Company Ltd with George Yates, specialising in commercial canyoning experiences and professional skills

training. He is a senior trainer with the UK Canyoning Association and helped establish that organisation in 2021.

[14] George Yates holds a BA (Hons) degree in Outdoor Leadership, completed in 2009, and has worked professionally as a canyoning guide since 2010 in the United Kingdom and internationally, including in New Zealand, France, Australia, Switzerland, Bali and the United States. He holds coaching and guiding qualifications in canoeing, kayaking, whitewater rafting, expedition leadership and canyoning. He is a director and Senior Trainer at the UK Canyoning Association.

[15] Robert Litherland has approximately 20 years professional experience as a river guide and trip leader, working internationally across a range of whitewater activities including rafting, inflatable canoeing and riverboarding. He has worked for around 10 years as an International Rafting Federation instructor and was a Rescue 3 Europe Instructor Trainer in several disciplines. His work included the training of emergency services, specialist paramedics, fire and police personnel, mountain rescue teams and professional river guides, both in the United Kingdom and abroad.

Site visits

[16] The site visits allowed the court and participants to see Stanley Weir and Dollar Glen. The principal value of those visits was explanatory rather than directly evidential. They provided context for photographs, videos and oral descriptions of the routes, water features, access and rescue difficulties.

C. Legal framework

Purpose of a Fatal Accident Inquiry

[17] The 2016 Act provides a public, inquisitorial mechanism for establishing the circumstances of certain deaths and considering what measures may be taken to prevent recurrence. It is not the purpose of a Fatal Accident Inquiry to establish civil or criminal liability. The authorities cited by parties during submissions confirm the exercise is fact finding rather than fault finding and that the inquiry should not be used to pillory or stigmatise individuals. The ordinary civil standard applies to findings of fact, being a balance of probabilities. The inquiry is governed by the Act of Sederunt (Fatal Accident Inquiry Rules) 2017. The procurator fiscal represents the public interest in investigating, arranging and conducting an inquiry.

[18] Section 26 of the Act sets out the matters to be covered in the determination. These include setting out findings on the following: (a) when and where the death occurred; (b) when and where any accident resulting in the death occurred; (c) the cause or causes of the death; (d) the cause or causes of any accident resulting in the death; (e) any precautions which – (i) could reasonably have been taken, and (ii) had they been taken, might realistically have resulted in the death, or any accident resulting in the death, being avoided; (f) any defects in any system of working which contributed to the death or any accident resulting in the death; (g) any other facts which are relevant to the circumstances of the death. They also include setting out such recommendations (if any) in relation to: (a) the taking of reasonable precautions; (b) the making of improvements to any system of working; (c) the introduction of a system of working;

(d) the taking of any other steps, which might realistically prevent other deaths in similar circumstances.

Section 26(2)(e) - Reasonable Precautions

[19] Section 26(2)(e) sets out a two-stage test in relation to precautions. Firstly, the court requires to be satisfied on the evidence that there was a precaution which could reasonably have been taken. Secondly, the court must be satisfied on the evidence that if the precaution in question had been taken, that it might realistically have avoided the death. Unless both criteria are met, no finding should be made in terms of section 26(2)(e).

[20] A finding as to a reasonable precaution whereby the death would have been avoided is not required. The wording of the provision instead refers to reasonable precautions which, if taken, might have resulted in the death being avoided. The explanatory notes to the 2016 Act provide that the use of the word “reasonably” relates to the reasonableness of taking the precaution rather than the foreseeability of the death or accident. They further provide that “A precaution might realistically have prevented a death if there is a real or likely possibility, rather than a remote chance, that it might have done so.” It follows that certainty as to avoidance of death is not required.

[21] In *Reclaiming Motion by Dr Karen Hunter against the Lord Advocate* [2025] CSIH 27 the First Division emphasise that a precaution bears its ordinary meaning; “a measure, action or step taken beforehand against a possible danger, risk or inconvenience” (paragraph 52). The inquiry must be satisfied the precaution might realistically have

avoided the death or accident. A mere theoretical possibility is insufficient. The same authority emphasised that where the statutory criteria are satisfied, a finding in terms of section 26(2)(e) is mandatory (para 51).

Section 26(2)(f) - Defects in System of Work

[22] Section 26(2)(f) concerns defects in any system of working which contributed to the death or any accident resulting in the death. This requires identification both of a system of working and of a defect in that system, together with the necessary causal contribution.

Section 26(2)(g) – Other Relevant Facts

[23] Section 26(2)(g) permits findings of other facts relevant to the circumstances of the death. It does not contain the same express causal requirement as demanded by paragraph (f). It is not a depository for every matter of general interest at proof. The fact must be relevant to the circumstances of the death.

Recommendations

[24] Recommendations are discretionary and forward-looking. A finding under section 26(2)(e) does not automatically require a recommendation. Equally, a recommendation must be grounded in the evidence and directed to preventing deaths in similar circumstances, rather than expressing a general preference for safer practice.

PART II – KAYDEN WALKER

A. Background

The deceased

[25] Kayden Walker was born on 16 January 2007 and was 12 years old at the time of his death. He lived with his parents in Bridgeton, Glasgow and was in his first year at St Mungo's Academy. Kayden attended and used the services of the charity, Church House, based at the Bridgeton Family Support Centre, Glasgow. He usually attended three times per week in term time and during the school holidays. He had done so for around 3 years. Kayden was a "Young Leader" at Church House, meaning that he helped other children using the services of the charity.

[26] In her evidence, Angela Malloy described the charity as being a significant part of Kayden's life. At the material time Ms Malloy was a project manager at Church House and had been since 2014. She left the charity in 2024.

[27] Kayden had previously taken part in several organised water-based activities, including kayaking, paddleboarding and whitewater rafting. Although he had limited swimming ability, those who observed him during previous activities described him as enjoying water sports and as being confident in the water. That previous experience appears to have been one of the factors relied upon in assessing him as suitable to participate in the event which ultimately led to his tragic death.

Church House

[28] Church House was established in 1942 in the East End of Glasgow in response to poverty, deprivation and limited opportunities for young people. It is a registered charity providing programmes and activities for children, young people and families. It offers a variety of programmes and activities for inner city families and disadvantaged children, free of charge. The charity has a board of trustees and receives funding from various third sector sources. The activities which it offers are directed towards assisting young people with confidence and resilience and offering them opportunities which they may otherwise not receive.

[29] During the summer of 2019 Church House organised a programme of activities. The 'Summer Activities Programme'¹ was provided to families. One of the activities it detailed was a riverboarding event to take place on 28 July 2019. It was the intention of Church House that they would engage Outdoor Pursuits Ltd to organise and deliver the event. In June 2019, Charlene Walker, Kayden's mother, attended at a Church House family evening where she was provided with a copy of the programme. Kayden selected several activities in which he wished to take part, including the riverboarding event.

¹ Crown production number 10.

The consent process

[30] Church House required all participants to complete a “Parental Consent Form”² prior to allowing any children to undertake any of their organised activities.

Charlene Walker completed and signed the consent form relating to her son on the 19th of June 2019, giving permission that Kayden attend the riverboarding event.

[31] The parental consent form specifically asked the question: “SWIMMING: Can your son/daughter swim 10 metres without the use of a flotation aid? Yes/No”.

Charlene Walker had circled the answer “No”.

[32] The consent forms for all the children who took part in the activity were lodged as productions³. One other child taking part in the activity was recorded as unable to swim 10 metres without a flotation aid.

[33] Outdoor Pursuits Ltd prepared a risk assessment in advance of the event itself⁴. That assessment was not site-specific and references riverboarding at one of four different venues, the River Tay at Stanley being one of them. It specifically addresses the risk of entrapment of the participants boards but is silent in respect of the risk of entrapment of individuals themselves.

[34] Before the commencement of the summer programme a meeting took place between Angela Malloy of Church House and Mr Robinson of Outdoor Pursuits Ltd. The various proposed activities, including the riverboarding excursion, was discussed. The precise date of that meeting was not established. At some point prior to 28 July 2019

² Crown production number 11.

³ Crown production number 11.

⁴ Crown production number 3.

the risk assessment forms that had been ingathered by Church House were provided to Outdoor Pursuits Ltd.

Outdoor Pursuits Ltd

[35] Outdoor Pursuits Ltd was incorporated as a company in January 2018. It has since ceased trading. The sole director of the company was Philip Robinson, who participated in the activity in which Kayden lost his life. Mr Robinson gave evidence to the inquiry. The company specialised in water based outdoor pursuits across various locations in Scotland.

[36] Church House had previously used Outdoor Pursuits Ltd as an external provider for several activities. Angela Malloy and Philip Robinson were known to each other professionally before the date of this accident.

[37] For the event, Outdoor Pursuits Ltd supplied the specialist equipment required by participants, and the two instructors, being Philip Robinson and Callum Gracie.

B. Riverboarding at Stanley

The activity of riverboarding

[38] Riverboarding, alternatively described in evidence as “boogie boarding”, is a relatively new water sport in the UK. It originated in Europe in the 1970s and began featuring as a water sport in the UK in the 1990s. It involves a participant lying prone and facing forward on a short buoyant board and travelling downstream, using fins

(flippers) and legs for steering and propulsion. The board is short and accommodates the participants torso down to the top of the thighs with the feet and legs trailing.

[39] Participants are alone on their board and need to take greater responsibility for their own safety than would be the case in the collective or team environment of, for example, a whitewater raft. A participant would normally have a wetsuit, helmet, flippers, the board itself and a body worn buoyancy aid.

The River Tay at Stanley Weir

[40] The River Tay is the longest river in Scotland originating in western Scotland and depositing into the sea at the Firth of Tay, south of Dundee. It is popular with anglers and canoeists and those participating in water sports such as riverboarding.

[41] A weir is a low barrier built across the width of a river to raise the upstream water level and control how water flows downstream. Unlike a dam that stores water in deep reservoirs, a weir lets water spill freely over its top edge (the crest).

[42] A weir crosses the River Tay at Stanley in Perthshire. It was originally constructed to control the flow of water and enable the water to be diverted to the Stanley Mill in its manufacture of textiles. It was constructed of concrete with steel reinforcement in the form of rods or mesh embedded inside the concrete. The weir is located on a bend on the river with steep banks on the west side and low-lying farmland on the east side. Upstream of the weir has a higher water level than downstream.

[43] The River Tay is approximately 250 metres wide at the point of the Stanley Weir.

[44] In the 1970's the weir was opened to allow easier passage for fish. This was achieved with explosives, and two large channels were created by blasting the reinforced concrete. The blasting of the weir created two navigable channels, both with irregular margins. Over time these have eroded to create a 'strainer' hazard for river users. A strainer is an obstruction that allows water to flow through it but will trap larger pieces of debris and pin them in place. Anything that forms a barrier on a river but allows the passage of water is a strainer. For a river user, the most significant risk associated with a strainer hazard is entrapment in debris combined with the continuing force of water. In the context of the weir at Stanley, the breached structure and associated submerged material from the structure make the danger particularly manifest. Portage around the weir is physically possible.

C. The events of 28 July 2019

Arrival and participants

[45] Kayden left home shortly after 8.00am and travelled with the Church House group from Glasgow. They arrived at the river near Stanley at about 12:30pm and met Philip Robinson and Callum Gracie, who were to lead the event. The group taking part from Church House comprised four adults from Church House and ten children aged from 12 to 17. Two of the adults present that day were Angela Malloy and Graham Hyndman. They had been working with Church House since 2014 and 2015 respectively. As at the date of this event, they were aged 48 years and 27 years respectively. At that time Church House had a policy of having one adult present for

every four children during outdoor events. The participants changed into wetsuits and were issued their equipment.

[46] At the date of the event Philip Robinson was 44 years of age. He was the owner and sole director of Outdoor Pursuits Ltd. He has been an outdoor instructor working with adults and children for more than 30 years. He has qualifications as a whitewater technician instructor, a whitewater kayak leader, a raft guide instructor and a first aid instructor. He had previously met Kayden Walker twice prior to this event when Kayden participated in other water-based activities. Mr Robinson gave evidence to the inquiry.

[47] At the date of the event Callum Gracie was 34 years of age. He worked freelance as an outdoors instructor. In that capacity he worked for several companies including Outdoor Pursuits Ltd. He was a qualified river leader, raft guide, hill and moorland leader, first aider and had completed training in safeguarding children and protecting vulnerable groups. Mr Gracie did not give evidence. The inquiry had access to his various police statements.

Equipment and buoyancy aides

[48] Outdoor Pursuits Ltd supplied wetsuits, helmets, fins, boards and personal flotation devices. Kayden's personal flotation device⁵ was a 50 Newton buoyancy aid. A buoyancy aid is distinguishable from a life jacket in that a buoyancy aid assists flotation,

⁵ Crown label number 5.

but it does not necessarily ensure that an unconscious wearer is held in a face up position with a clear airway. The buoyancy aid issued to Kayden contained a label on the interior stating “For use by those who can swim and are close to help”.

[49] The inquiry heard evidence about alternative buoyancy aids and collars, but there was no evidence that the personal flotation device issued to Kayden was defective in any way. Nor was there evidence that any alternative buoyancy aid would have prevented the entrapment which subsequently befell Kayden.

Water level

[50] The river level on the day of the event was recorded by the Scottish Environment Protection Agency website “water gauge” tool as “low to scrapeable” meaning the water was shallow. There are visual indicators at the access point on the river, including a marker stone. On that day the marker stone was visible and the beach was showing. There were no adverse weather conditions.

Safety briefing and familiarisation

[51] Having arrived and changed into their wetsuits, the group received around 30 minutes of instruction from the two instructors. Callum Gracie delivered a safety briefing on land, before the group entered the water for a period of familiarisation with their equipment. Philip Robinson led the water familiarisation session. This was done upstream of the weir. No swimming tests were conducted.

[52] Those sessions included instruction on the use of boards and fins, and what to do if a participant became separated from his or her board. Participants were instructed to adopt the defensive or safe swimming position if they became divorced from their board. That involves the participant floating on his or her back with feet pointed downstream, so that obstacles can be seen and the feet are available to protect the body. Participants were told to remain in that position until one of the instructors came to collect them.

[53] Kayden initially had some difficulty perfecting the riverboarding technique. He tended to kick with his knees rather than with his hips. Ultimately, after a period of practice he was able to adopt the appropriate technique.

The Weir

[54] The group were to navigate a three-kilometre section of the river. They entered the water with Philip Robinson leading, who was also using a body board. Callum Gracie was in a kayak. The first significant feature which they encountered was Stanley Weir.

[55] Most of the group negotiated the weir without incident. The line taken was through one of the breached channels in the weir. Participants were to follow the flow of the water through the channel. Kayden was among the last members of the group approaching the weir. Philip Robinson and most of the group had already descended. Angela Malloy, Graham Hyndman, Kayden, two other child participants, and Callum Gracie were the last to negotiate the weir.

[56] Callum Gracie accompanied the two other children down. At that time Philip Robinson was further downstream. Callum Gracie took up position around fifteen feet downstream of the weir. He observed Angela Malloy, Graham Hyndman and Kayden were above the weir.

[57] Ms Malloy descended closely followed by Mr Hyndman. When she reached the bottom of the weir, Ms Malloy turned and faced upstream. As Graham Hyndman descended, he became separated from his board. He submerged and resurfaced close beside Ms Malloy. Mr Hyndman gave evidence that he is an average swimmer. He said it was the speed of the water that caused him to become separated from his board.

[58] Ms Malloy and Mr Hyndman looked upstream for Kayden. They could not see him. Kayden's board resurfaced near them without Kayden. Mr Gracie saw the board pop out of the water. On realising Kayden had not descended he immediately began paddling back upstream. He exited his kayak beside the point where he had last seen Kayden. He put his hand under the water in that area. He located Kayden, approximately an arm's length underwater. He felt Kayden's arm and took hold of it. Kayden grabbed Mr Gracie's arm in return. Mr Gracie attempted to pull Kayden in an upstream direction to raise his head above the water but realised that Kayden was stuck. He shouted for Mr Hyndman to swim back towards them and help. The current was too strong, and Mr Hyndman could not reach them.

[59] Ms Malloy and Mr Hyndman alerted Mr Robinson who began to make his way back to Kayden's location. Ms Malloy and Mr Hyndman left the river and started running back in the hope of helping Mr Gracie.

[60] Mr Gracie was still trying to extract Kayden. He managed to attach a carabiner (a metal loop with a spring-loaded gate normally used to connect ropes and harnesses) to the shoulder of Kayden's buoyancy aid to try and pull him free. He described Kayden's legs as being 'hair pinned' around some branches. The water was at Mr Gracie's shoulder level. Around that time Kayden let go of Mr Gracie's arm. Mr Gracie concluded that Kayden must be losing consciousness. Mr Gracie submerged himself under the water and began pulling on Kayden's legs to try and free him. He placed a sling under Kayden's legs and, using a sawing motion, eventually managed to release him. Kayden was thereafter carried down the rapids by the flow of the water where he was caught by Mr Robinson who had been traversing upstream. He immediately began CPR.

[61] Mr Gracie got back into the kayak and paddled down towards Mr Robinson and Kayden in the water. They put Kayden in the kayak and took turns performing CPR for around 15 minutes.

[62] The attempted rescue had been difficult and dangerous. Mr Gracie had repeatedly tried to raise Kayden's airway above water while the current acted upon them. The fact that Mr Hyndman was unable to swim back due to the current offers some insight into its strength. Mr Gracie ultimately submerged himself to work on the entrapment. Mr Gracie himself was exposed to the force of the water and the entrapment environment, and in doing so, clearly imperilled his own life. Tragically his efforts were unsuccessful.

Emergency response

[63] At 1318 hours Miss Malloy contacted the emergency services. An air ambulance was dispatched to the scene which arrived at around 1337 hours on one of the riverbanks.

[64] Mr Robinson and Mr Gracie then stabilised the kayak and started moving it towards the shore. In so doing they were swept approximately 150 metres downstream where Mr Hyndman was standing with another adult leader. They assisted in pulling the kayak to shore. Mr Robinson and Mr Gracie continued CPR until the paramedics got to their location and were able to take over.

[65] The air ambulance paramedics continued CPR for around 45 minutes until there was an indication of spontaneous circulation. The paramedics cut-off Kayden's wetsuit and administered adrenaline and sodium chloride.

[66] Ultimately Kayden was conveyed to Ninewells Hospital in Dundee where he arrived at 1550 hours. Upon arrival Kayden was unconscious, his pupils were fixed and dilated, and he was found to have a Glasgow Coma scale of three. A CT scan revealed a hypoxic ischaemic brain injury and generalised cerebral and cerebellar low attenuation and swelling.

[67] On 29 July 2019, Kayden was transferred by air ambulance to the Royal Hospital for Sick Children at Glasgow. His condition deteriorated, and he died at 1510 hours that day⁶.

⁶ Written submissions for the Crown and Outdoor Pursuits Ltd incorrectly recorded the time of death as 1310 hours.

Post-mortem examination

[68] A post-mortem examination was carried out on 1 August 2019 by forensic pathologists Dr Marjorie Turner and Dr Julie McAdam. They determined the cause of death to be:

- 1a Hypoxic/Ischaemic brain damage due to
- 1b Drowning.

[69] The pathologists commented that Kayden had suffered hypoxic ischaemic brain damage due to a period of cardiac arrest before his circulation was successfully restored. While his lungs did not show any of the classic features of drowning, this was to be expected given the resuscitation and survival period.

[70] The pathologists noted slight abrasion injuries over his nose and bruising on both sides of his chest and upper arms consistent with attempts to extract him from the water.

Police investigation and prosecution

[71] Kayden's death was investigated by Police Scotland and Perth and Kinross Council.

[72] Acting in its capacity as a reporting agency, the local authority submitted a report to the Crown Office and Procurator Fiscal Service recommending prosecution of Outdoor Pursuits Ltd for a contravention of sections 3 and 33(1)(a) of the Health and Safety at Work etc. Act 1974.

[73] Outdoor Pursuits Ltd pled guilty at Perth Sheriff Court on 21 October 2024.

[74] That plea of guilty included a concession on the part of Outdoor Pursuits Ltd that the risk assessment it had used was not suitable and sufficient. It failed to identify a safe system of work to enable participants to safely negotiate the weir, and specifically, that guides should have been positioned above and below the weir during the event.

D. Cause and mechanism of the accident

[75] The evidence suggests the following non-controversial sequence: Kayden approached Stanley Weir on a riverboard; he became separated from the board during the course of descent; the board emerged below the weir without him; he remained submerged upstream; Mr Gracie located him underwater and found him physically stuck; substantial force and a sling were required to free him; once released, the current carried him downstream. This is all consistent with entrapment at a strainer type hazard at or immediately adjacent to the breached weir.

The precise means of entrapment

[76] No witness observed to the precise moment of entrapment. Mr Gracie's tactile observations during rescue suggest Kayden's legs were caught around branches or other debris. The evidence disclosed irregular concrete, exposed reinforcement bars and other potential entrapment features. On the evidence it is impossible to state with absolute certainty precisely what material or feature caused the entrapment.

E. Material issues

Adequacy of risk assessments

[77] In relation to the risk assessment process deployed by both Church House and Outdoor Pursuits Ltd various criticisms were advanced during the inquiry. The Crown suggests that the risk assessment process carried out by Church House concentrated principally upon safeguarding and child protection rather than the physical hazards associated with the activities themselves. In particular, it did not itself identify or evaluate the hazards presented by Stanley Weir or the participation of weaker swimmers. The Crown further submits that while Kayden's consent form expressly recorded his inability to swim, there was thereafter nothing noted demonstrating what significance had been attached to that information.

[78] Church House's own safeguarding guidance⁷ states that a risk assessment should identify risks, identify the safeguards needed, record who is responsible for implementing them, and be completed, signed, dated and reviewed. It provides that parents should be kept fully informed. Its checklist specifically asks whether physical hazards have been identified and whether action has been taken to address them.

[79] Using that as its basis, the Crown argues that Church House ought to have had a more robust process for identifying the physical hazards faced by the children and for scrutinising consent information provided by the children and their parents.

⁷ Crown production number 6.

[80] In general terms the answer provided on behalf of Church House is that they are not the technical provider of the activity. They had engaged Outdoor Pursuits Ltd because that company possessed the necessary expertise to select the venue, assess river conditions, provide equipment and instructors, and determine the precautions required for riverboarding. Church House had used Mr Robinson previously, regarded Outdoor Pursuits Ltd as a reputable specialist provider, and it was entirely reasonable for them to rely upon that expertise.

[81] It was submitted that Kayden's limited swimming ability was not overlooked. It was known to both organisations involved in this event. Kayden had successfully participated in several previous water sports and was regarded by those who knew him as comfortable or confident in the water. Church House argue that a more elaborate internal risk assessment would not have materially added to the technical assessment which Outdoor Pursuits Ltd was specifically engaged to undertake. Church House contend that it was for the specialist provider, rather than the charity, to assess and mitigate the risks inherent in riverboarding. It disputes causation, arguing that even if its paperwork or communication could have been more detailed, there is insufficient evidence that such a change would have altered the decision to permit Kayden to participate or that it would have prevented the entrapment which caused his death.

[82] In respect of Church House, I do not find that its risk assessment process amounted to a defect which contributed to Kayden's death. Its safeguarding documentation plainly contemplated consideration of physical hazards as well as conventional child protection matters. Its procedures could have recorded more clearly

the nature and location of this particular activity, the significance of participants swimming information, and the division of responsibilities between Church House and Outdoor Pursuits Ltd. Those would have been improvements. Yet, Church House was not itself competent to assess the hydrology of Stanley Weir, the likelihood of foot entrapment or the appropriate way that feature should be negotiated. It had engaged an experienced specialist provider for that purpose and was entitled to place substantial reliance upon that expertise. Kayden's swimming limitation was not concealed from the process, and, for the reasons later addressed, the evidence does not establish that his inability to swim was itself causative of the entrapment. I consider the deficiencies in Church House's paperwork and communication to be matters of good practice rather than defects shown to have contributed to the accident.

[83] The position in relation to Outdoor Pursuits Ltd is different. In summary its written risk assessment⁸ covers several different venues. These include the River Tay from Aberfeldy to Grandtully, the River Tay from Thistlebrigg to Stanley, Pinkston and the River Tummel. The evidence showed these venues to be quite different in character and with significant differences in challenge. It prescribes a general maximum ratio of two guides to 16 participants, with one guide on a board and an accompanying kayak acting as a safety boat. It identifies hazards including drowning, hypothermia, severe weather/river conditions and entrapment.

⁸ Crown production number 3.

[84] The document contains some meaningful controls. In terms of mitigating the risk of drowning the document provides for effective group supervision, an appropriate ratio, a safety brief, an assessment of participants swimming confidence and correctly fitted buoyancy aids. It expressly requires consultation of weather and river level information and a dynamic risk assessment while on the water. But in relation to the critical issue of entrapment, the document seems to primarily anticipate the board becoming entrapped not the participants body or limb. There is no identification in the written document of Stanley Weir as a specific hazard, nor of its breached concrete structure, recognised entrapment characteristics or the requirement to have one instructor positioned above and one instructor positioned below at the point of participants descent.

[85] Mr Davis was highly critical of the document. He considered the assessment too generic and insufficiently site-specific, particularly because it did not address the weir specifically, its known dangers of entrapment, the capabilities of participants or a specific system for negotiating the feature.

[86] Mr Robinson's evidence was that the written assessment formed only one element of a broader system. Before the trip he checked river levels. At the river he used visual indicators of water height. He had recently traversed the river and had previously inspected the weir, including looking for exposed steel or other hazards. He described dynamic assessment as continuing throughout the activity.

[87] Mr Litherland supports the importance of that dynamic approach. His evidence was that rivers are inherently changing environments and that a written site-specific

assessment can only provide background as water levels fluctuate, debris moves and submerged hazards may be entirely imperceptible. A competent guide must assess conditions dynamically on the day.

[88] In submissions, Outdoor Pursuits Ltd accepts that the written assessment was deficient as it failed to expressly identify the body entrapment risk at Stanley Weir. But it was further submitted that criticism should not be expanded into a finding that no risk assessment existed or that no thought had been given to drowning, entrapment or rescue.

[89] The Outdoor Pursuits Ltd risk assessment was not devoid of substance as it did identify drowning relevant factors such as supervision, participant confidence, buoyancy aids, kayak support and dynamic risk assessment. The defect was more precise. It treated entrapment principally as a problem of the board becoming caught on rocks or vegetation and did not identify the corresponding risk of a participant's foot, limb or body becoming entrapped. Nor did it convert the known entrapment hazard at Stanley Weir into an operational plan governing how participants were to pass the feature. I accept that no written assessment could identify every concealed object in a changing river and that dynamic assessment is essential. The deficiency here was not failure to predict the precise underwater object which caught Kayden. It was a failure to identify the type of catastrophic hazard known to be present at that location and to outline a system designed to control exposure to it.

[90] I find that the Outdoor Pursuits Ltd risk assessment was not suitable and sufficient in that limited but material respect. That omission formed part of a defect in

the system of working which contributed to the accident. Had the risk of body or limb entrapment at Stanley Weir been expressly assessed, it should have generated a corresponding method of work for negotiating the feature, including the positioning of instructors above and below the weir until all participants had passed safely. That conclusion is consistent with Mr Davis' evidence and with Outdoor Pursuits Ltd guilty plea.

[91] On a separate but related note the Crown argued that Church House had not communicated sufficient detail in relation to the exact nature of the activity nor the intended location. The evidence does not establish that any deficiency in the information given to Kayden's mother contributed to the accident. There is no basis to conclude that had further detail been provided about the precise location or nature of the riverboarding activity, that consent would have been withheld or the accident avoided. I am not persuaded that there were any shortcomings in the level of information provided to parents that can be said to have a causative connection with Kayden's death.

Communication of Kayden's swimming ability

[92] On the evidence, Kayden's limited swimming ability was known to both Church House and the Outdoor Pursuits Ltd instructors.

[93] The Crown places significant weight on the parental consent form which expressly recorded that Kayden could not swim 10 metres unaided. It submits that Church House should have attached greater significance to the swimming information

and that meetings with the provider should have focused more closely on whether non swimmers require additional precautions. It similarly submits that Outdoor Pursuits Ltd should have expressly recorded the decision making taken around weak swimmer status. The Crown's proposed system-of-work findings are framed accordingly.

[94] The underlying Crown contention is that the information was not sufficiently acted upon within the decision-making process.

[95] Church House replies that there was no material failure of communication because the relevant information was known to the relevant people. Moreover, Church House staff had substantial first-hand experience of Kayden taking part in previous water-based activities and regarded him as confident in the water. They submit that the Crown's criticism about attaching greater weight to the consent form does not identify an information deficit as all the relevant parties already knew the position.

[96] Outdoor Pursuits Ltd essentially make the same distinction. Mr Robinson accepted that the consent information identified Kayden as a non-swimmer. His evidence was that swimming ability was considered alongside Kayden's prior experience, his confidence and composure in water, his ability to float with a buoyancy aid and wetsuit, his ability to follow instructions and his performance during familiarisation. It is argued that the swimming information was not absent or overlooked. A professional judgement was made that inability to swim 10 metres did not, of itself, make an individual unsuitable for supervised riverboarding.

[97] I am satisfied that there was no material failure to communicate Kayden's limited swimming ability between the relevant parties. There is no evidence to suggest that Kayden participated because some material fact about his swimming ability had failed to pass from parent to Church House to Outdoor Pursuits Ltd. That information had reached the people responsible for making decisions about his participation. To the extent that the Crown invites a finding that defective information sharing itself contributed to the accident or death, I reject that.

[98] The real issue lies in what weight was attached to the knowledge about Kayden's swimming ability and the safety decisions made in consequence of it. Church House and Outdoor Pursuits Ltd did not treat that information as automatically disqualifying. It was considered against several factors including Kayden's previous participation in water sports, the use of flotation equipment and the supervised nature of the activity. Outdoor Pursuits Ltd treated functional confidence and competence in the water as more significant than an ability to swim a specified distance unaided. Whether that judgement was correct is properly considered under the separate questions of suitability for the activity, risk assessment and portage.

Kayden's swimming ability

[99] This was a central and highly contested question which occupied much of the evidence during the inquiry. The Crown submit that Kayden should not have been included in a waterborne activity that required the traverse of Stanley Weir.

[100] In her evidence, Ms Malloy indicated that she understood from Mr Robinson that participants did not need to be able to swim. Mr Robinson's position was that a child who cannot swim could nonetheless participate so long as they were confident in the water. That contradicted a position he had advanced in a statement to the police on the 8 August 2019, where he stated, "All of the children and adults we take out have to be able to swim and be confident". Mr Robinson did not recall saying that to the police.

[101] Church House and Outdoor Pursuits Ltd submit that swimming ability did not cause the physical entrapment. Once a person is pinned by the strainer then the relevant forces - rather than swimming competence - determined the tragic outcome.

[102] In respect of this issue the inquiry heard helpful evidence principally from Mr Davis and Mr Litherland. Both recognise that the fatal mechanism was an underwater entrapment.

[103] Mr Davis places significant weight on Kayden being a weak swimmer. He regards the failure to adequately mitigate the risk to a weak swimmer as an important factor. He considers that novices should be taught both a defensive swimming technique - with feet up and pointing downstream - which will reduce the danger of entrapment, together with an aggressive swimming technique, known as whitewater swimming, which will permit a participant to move away from danger. He argues that such training could have made a difference once Kayden lost his board. As I understand Mr Davis' conclusions, he says that failure to drill the group on whitewater swimming and the absence of a plan for a weak swimmer may have contributed, while identifying

the decision to take the group through the hazardous section of river as the principal cause.

[104] Mr Litherland rejects the proposition that ordinary swimming ability was materially relevant to the mechanism of death. His evidence was that manoeuvring effectively in white water is a specialised skill which even experienced swimmers do not acquire simply from being able to swim. For ordinary participants the principal safeguard is the defensive swimming position, supported by appropriate PPE and buoyancy. Importantly, he confirms that adopting the defensive position does not itself require an ability to swim. He further observed that guides ordinarily cannot rely on participants, even confident swimmers, to self-rescue when unexpectedly separated from their craft. He disputed Mr Davis' criticism concerning the absence of a whitewater swim test. In Mr Litherland's experience such testing is not normal industry practice for an activity of this grade, and on a trip of this nature swimming ability is more relevant to comfort and enjoyment than safety. He suggested that even a strong and confident swimmer can be tumbled out of the defensive position by the hydrology, including force of the current, allowing a foot to be drawn down and entrapped. He consequently concludes that swimming ability or a lack thereof does not remove the inherent risk of entrapment.

[105] On this point I prefer the evidence of Mr Litherland. Kayden was a weak swimmer, and the evidence showed that his capabilities generally formed part of the assessment of whether he should participate. That is relevant to risk management. But that does not establish the necessary causal connection between his inability to swim

conventionally and the particular mechanism which resulted in his tragic death. The relevant protective technique after separation from the board was not conventional swimming but the adoption of the defensive position, principally designed to keep the participant buoyant and the feet away from the riverbed. That position did not require an ability to swim. The evidence showed that the forces of moving water can displace even a strong swimmer from the defensive position and expose the feet to an entrapment hazard. Expressed another way, there is nothing to conclude that had Kayden been a competent, conventional swimmer he would have avoided entrapment or survived.

[106] I do not find it established, on a balance of probabilities, that Kayden's inability to swim contributed to his death. His limited swimming ability was a circumstance which formed part of the consideration of those delivering the event, but that is different from causation.

Warning signs at Stanley

[107] There are warning signs at the access point to the River Tay at Stanley. The signs refer to the dangers of swimming there given the strong currents and deep water. The Crown drew attention to the fact that Church House staff did not appear to attach any significance to the signs. Mr Robinson did not regard those signs as applicable to a professionally supervised riverboarding activity. The signs form part of the factual background, but they do not establish that the excursion ought not to have taken place. Nor do they amount to a causative failure on the part of either organisation.

Professional water sports and other organised outdoor activities will regularly take place in environments where members of the public are warned against swimming or entering the water without supervision. Those same environments are the ordinary working environment of trained instructors whose professional function is to assess conditions, manage hazards and determine whether an activity can proceed safely. The relevant question was not about the existence of signs warning the public, but rather whether the specific risks of that day's activity were properly assessed and controlled.

Buoyancy aid and other equipment

[108] The evidence established that Kayden was provided with the same core equipment as the other participants, that being a wetsuit, helmet, fins, board and 50N buoyancy aid. There was no evidence that any item issued to him was damaged, incorrectly fitted or defective. The Crown properly drew attention to the labelling of the buoyancy aid as noted above. Mr Davis expressed a preference for greater buoyancy, and in some respects, a different board design. He considered that equipment choice formed part of the wider safety management system. He did not go so far as to say that a different buoyancy aid or board would have prevented Kayden's entrapment or death.

[109] Mr Litherland regarded the buoyancy aid as entirely conventional for the activity and offered no criticism of the PPE provided. His evidence was that any practical difference between a 50N aid and a 65/70N aid would have been negligible once Kayden's foot had become trapped and he was being forced beneath the water. He explained that equipment alternatives can introduce different risks. For example,

greater buoyancy or different board designs may affect handling. Handles on boards can create snagging or entanglement risks or encourage a participant to retain the board when the safer response is to release it.

[110] Equipment selection is plainly a matter requiring proper consideration. The evidence does not establish that the equipment supplied to Kayden was unsuitable for the activity or that any alternative item would realistically have prevented the fatal sequence. The operative mechanism was underwater entrapment, and neither expert established that a different board, buoyancy aid or additional item of PPE would have avoided that entrapment or materially altered the outcome. There was no deficiency in the equipment provided which was causative of Kayden's death.

Adequacy of familiarisation and safety briefing

[111] The group received both a land-based safety briefing and a period of practical familiarisation in shallow or flat water before proceeding downstream. Mr Gracie delivered the initial briefing, and Mr Robinson conducted the on-water familiarisation. Participants were instructed on board positions, use of fins, what to do if they fell from or lost the board and the defensive swimming position. Ms Malloy and Mr Hyndman both described the instruction to lie on the back, keep the feet downstream and allow the buoyancy aid to assist rather than pursuing the board. Mr Robinson described his role during that process as including observation of whether participants could balance on the board, use their fins, follow signals, adopt the defensive position and remount where appropriate.

[112] The Crown criticises that there was no separate moving water or whitewater swim test before departure and that Kayden experienced some difficulty during familiarisation. There was some evidence that Kayden had difficulty with the kicking technique required for successful riverboarding but ultimately confirmed that he had mastered the technique before departure. There was no evidence that he asked to stop or that his performance during familiarisation caused those supervising him to conclude that he was unable to proceed.

[113] I am satisfied that the safety briefing and familiarisation process was adequate for the purpose of introducing the group to the equipment and the principal safety techniques required for the activity. It included relevant instruction, practical rehearsal and an opportunity for the instructors to observe whether participants could cope with the equipment and follow the required techniques. The fact that Kayden initially required some assistance does not render the process inadequate. Familiarisation sessions exist, in part at least, to identify and correct such difficulties, and the evidence was that he improved sufficiently well to embark upon the activity.

[114] I do not find that there was any defect in the pre-activity safety briefing or familiarisation which contributed to the accident or the death. Even if it had been possible to provide additional moving water rehearsal, that evidence would not establish that such additional training would materially have affected the later entrapment.

Portage around Stanley Weir

[115] The Crown submit that a simple means of eliminating any challenge to Kayden as a non-swimmer would have been for him to have exited the river above the weir, carried his board along the bank to a location below the weir, re-enter the water and rejoin the group (portage). Outdoor Pursuits Ltd submit that three propositions require to be kept separate: firstly, it is self-evident that a person cannot be injured by a river feature if the person is not taken to that feature; secondly, avoidance of a hazard may, in an appropriate case, amount to a reasonable precaution; thirdly, it does not follow that every decision to undertake an adventure activity or to include a feature which forms part of that activity, falls to be recast with hindsight as a failure to take a reasonable precaution.

[116] Mr Davis gave evidence that taking the group through Stanley Weir was an unnecessary exposure to a recognised entrapment hazard. He considered the decision a serious error of judgement, particularly given the size and composition of the group, which included weak swimmers. His criticism was founded on the absence of an adequate site-specific risk assessment of the weir and the failure to address the risks presented by low water and foot entrapment.

[117] His proposed alternative was specific and practicable: the group could have left the river upstream and portaged along the riverbank footpath. In his view that would have been a simple safety measure which removed the group altogether from the hazard presented by the feature. That evidence, of course, must be seen against the above noted peculiarities of Stanley Weir. It is well known amongst those organising events there,

that the navigable channels created by explosives have irregular margins and manifest strainer hazards.

[118] Mr Litherland highlighted that this is not a conventional vertical weir. At the prevailing low water level, he characterises it as a downstream “V” created through the dismantled section of the weir. In white water terms, such a feature may indicate deeper and relatively unobstructed flow and is of a type guides would ordinarily regard as suitable for riverboarding. He criticises Mr Davis for using the phrase “over the weir” which he considers overstates the apparent risk. That description, he argues, invokes the hazards associated with a conventional weir face rather than the chute actually being negotiated.

[119] Mr Litherland emphasises that subsurface entrapment hazards occur throughout natural rivers, are frequently impossible to detect, and cannot sensibly require portage whenever they might theoretically exist. His evidence was that there was no apparent hydrological warning on that day of a particular subsurface hazard and the feature appeared suitable for that group.

[120] I accept the distinction between the downstream “V” weir versus a conventional vertical weir, and I accept that an experienced guide might, judging by surface hydrology alone, regard such a feature as navigable. I also accept that the mere existence of an unidentified subsurface entrapment risk would not ordinarily justify avoiding every section of natural river.

[121] Nonetheless, this was not simply an unforeseeable riverbed hazard. This was a man-made, reinforced concrete structure which had been blasted apart, leaving irregular

margins that had subsequently eroded and created a strainer hazard causing significant risk of entrapment. In those circumstances, the entrapment risk cannot properly be treated merely as the ubiquitous background risk associated with any natural riverbed.

[122] That conclusion is reinforced by the nature of the group participating. River boarding requires each participant to control an individual board and take greater responsibility for his or her own safety than would be required in a team environment, such as rafting. The group comprised ten children and four Church House adults, and it was known in advance that two of the children, including Kayden, could not swim 10 metres unaided. The weir was the first feature encountered after the familiarisation session. Those circumstances called for a conservative assessment of whether exposure to the feature was necessary. The fact that most participants negotiated it safely does not answer that question, the issue is whether the risk needed to be taken at all.

[123] In my view it did not. There was a straightforward alternative: leave the river upstream and use the adjacent footpath. That would have removed the group from the identified strainer hazard altogether. The group ought to have portaged the feature. That conclusion does not depend upon hindsight. It rests upon the agreed existence of an entrapment-producing strainer hazard at the breached weir, the vulnerability and relative inexperience of the group, and the clear and obvious availability of a simple means of avoiding that hazard altogether.

Instructor participant ratio and instructor positioning

[124] There are two separate but related issues concerning the instructors' involvement: firstly, whether the instructor to participant ratio was inadequate and secondly, whether the two instructors who were present were positioned appropriately at Stanley Weir.

[125] The Outdoor Pursuits Ltd risk assessment permitted two instructors for up to sixteen participants. On the day there were two instructors and fourteen customers. The adults present from Church House were not present in an instructor capacity, and were themselves participants in the activity, who required the support and guidance of the two instructors.

[126] Mr Davis' concern was that, as a riverboarding group becomes spread out, participants towards the rear may deviate progressively from the line demonstrated by the lead instructor, while the instructors become less able to communicate with and support one another. He regarded proximity between instructors as particularly important in responding to an emergency. He considered the group size for this type of activity to be large and noted that the lead instructor was unable to get to the site of the accident in time to assist in freeing Kayden. He was of the view that a third instructor would have been desirable. Nevertheless, as I understood his evidence, he accepted that two instructors could have been sufficient if the activity had been managed differently.

[127] Mr Davis' stronger criticism was one of positioning, his firm view being that there should have been one instructor above and one below the weir until every participant had passed through it. That position reflects the substance of the criminal

case brought against Outdoor Pursuits Ltd. That arrangement would have allowed participants to be managed individually, enabled the upstream instructor to align each person correctly before entering the chute, and left both instructors better placed to respond to an entrapment.

[128] Mr Litherland disagrees that either the ratio or the general positioning was inappropriate. He applies the CLAP principles – Communication, Line of Sight, Avoidance and Position of Maximum Usefulness. His view is that having one instructor leading from the front and another occupying a mobile or “sheepdog” position towards the rear is a conventional way of controlling a river group. The lead instructor demonstrates the line and provides downstream cover, while the second instructor moves within the group, corrects participants and ensures nobody becomes detached from the group. He regarded Mr Robinson at the front and Mr Gracie in the roving rear position as normal practice. He argued that the response to the accident appeared to have been prompt which demonstrated that Mr Gracie must have maintained sufficient awareness to recognise something was wrong when the board emerged without Kayden and he immediately returned to locate him. He placed some weight upon the presence of the Church House adults, who, although not qualified instructors, could support the children.

[129] On the question of ratio, I understood Mr Litherland’s position to be that there is no useful numerical rule in relation to group control. Rather, the relevant questions are whether the instructors can maintain communication, lines of sight and effective control.

There was no evidence of group dispersal or disorder which would demonstrate that the ratio had become inadequate.

[130] On the question of instructor-to-participant ratio, Mr Davis identifies legitimate concerns about the demands imposed by a large and potentially dispersed group.

Nonetheless, the evidence does not establish that two instructors for this group was inadequate of itself, or that the presence of a third instructor would probably have altered the course of events. While a third instructor may have increased the safety margin, two instructors, well trained and experienced as these two were, could have been sufficient depending upon the way in which the group was being managed. The evidence does not disclose that the group generally became uncontrolled or widely dispersed, and the Church House adults were present among the children and capable of providing some support, albeit they were not substitutes for qualified instructors. I do not find that the numerical ratio itself was a defect which contributed to the accident.

[131] Instructor positioning is a fundamental component of safe river management.

The critical consideration is not the general legitimacy of a lead-and-sheepdog formation while travelling along the river. I accept Mr Litherland's evidence that such a formation is an accepted river-management technique. In my assessment, the position changed when the group reached a discrete feature involving an identified risk of entrapment and requiring participants to follow a particular line. At that point the general travelling formation required to give way to feature-specific positioning. Kayden became the last participant upstream after both qualified instructors had passed below the feature.

Although Mr Gracie retained a line of sight and responded rapidly, he was necessarily

responding after Kayden had entered the feature and disappeared. The presence of one instructor upstream and one downstream would have materially reduced the risk in two distinct respects. Firstly, the upstream instructor would have retained direct control of each participant before commitment to the feature. He would have been able to decide when Kayden should enter, and if his positioning or intended line or other conditions gave cause for concern, he would have been able to stop the descent altogether.

Secondly, that instructor would have remained in close proximity to the point at which any difficulty first became apparent and could have intervened without first having to travel back upstream against the flow. Upstream and downstream positioning would have created an additional opportunity to identify and respond to difficulty at an earlier stage.

[132] That conclusion does not, in any way, suggest a criticism of Mr Gracie's response once the accident occurred as the evidence demonstrates that he acted promptly and courageously. Nor do I conclude that different positioning would certainly have prevented the entrapment. The relevant point is that maintaining one instructor above and one below until the last participant had passed was an available and practicable control that would have materially increased the prospect of permitting an earlier intervention. This finding effectively formed part of the factual basis upon which Outdoor Pursuits Ltd pled guilty in the criminal court.

Rescue attempts and emergency response

[133] I am satisfied that once the emergency was identified, all that could reasonably be done to rescue and resuscitate Kayden was done. Mr Litherland's expert evidence supports that conclusion. He considered that no time was wasted and that Mr Gracie's "hands on" intervention was appropriate notwithstanding the risk to himself. He concluded that the rescue process conformed to best practice. The subsequent response - from immediate CPR, extraction to the riverbank, paramedic resuscitation, air ambulance transfer and hospital treatment - was prompt and sustained. Nothing in the evidence supports criticism of the rescue or emergency medical response. On the contrary, it demonstrates determined and courageous efforts to save Kayden.

Regulatory oversight and the Adventure Activities Licensing Authority

[134] The Adventure Activities Licensing Authority (AALA) was established following the Lyme Bay sea-kayaking tragedy in 1993 by virtue of the Activity Centres (Young Persons' Safety) Act 1995. Its function is to provide additional assurance where specified adventure activities are supplied commercially to persons under 18. Before the AALA will grant a license for an activity, the provider must demonstrate to the AALA that they have in place suitable and sufficient safety management arrangements. Frances Kelly, senior policy adviser/HM inspector with HSE and AALA, gave evidence to the inquiry. Ms Kelly described the purpose of the scheme as ensuring that activity providers have effective systems capable of avoiding preventable serious injury to young people.

[135] The statutory scheme applies to four categories: climbing, caving, trekking and water sports. The water sports definition is specific. It covers canoes, kayaks or similar hand-paddled craft, rafts, and certain sailing craft when used on specified water, including inland water made turbulent by weirs, rapids, waterfalls or fast-flowing currents. Riverboarding does not fall within those definitions and is not a licensable activity under the AALA regime.

[136] The AALA does not treat a riverboard as a “raft”. This is essentially because in riverboarding the participant is intended to be immersed in the water rather than conveyed on top of a vessel. The exclusion arises from the statutory categorisation of the equipment and activity, not because riverboarding has been assessed as presenting insufficient risk to justify oversight. Indeed, Ms Kelly accepted that riverboarding can, depending upon the circumstances, be a high-risk activity.

[137] AALA oversight provides identifiable safety benefits. An applicant must demonstrate a suitable and sufficient assessment of risk, appropriate control measures, arrangements for implementing and reviewing those controls, adequate safety information, sufficient competent instructors, suitable equipment, first aid and emergency arrangements, and access to competent safety advice. Applications for a licence are scrutinised by experienced outdoor professionals who may examine documents, equipment and operating arrangements before approval. The process introduces a degree of independent scrutiny. Mr Davis regarded the external scrutiny as capable of improving decision making and reducing the danger of familiarity or complacency becoming embedded in an operator's practice.

[138] The AALA does not supervise activities as they occur. Nor do they routinely monitor day-to-day compliance. The provider remains responsible for the safe conduct of the activity.

[139] In Kayden's case, because riverboarding falls outwith the statutory definition, Outdoor Pursuits Ltd was not required to hold an AALA licence and AALA had no oversight role. The AALA did not investigate this accident and had no authority to take licensing action against Outdoor Pursuits Ltd. That investigation instead fell to Perth and Kinross Council under ordinary health and safety legislation and ultimately resulted in prosecution. Ms Kelly was clear that it is not possible to say whether the accident would have been avoided had riverboarding been licensable.

[140] I do not find that the absence of AALA licensing caused or contributed to Kayden's death. Such a conclusion would require speculation about what an inspector would have identified, what conditions would have been imposed, how Outdoor Pursuits Ltd would have responded, and whether those matters would in turn have prevented the entrapment at Stanley Weir. The evidence does not permit any of those steps to be established with any degree of certainty.

[141] Nonetheless, the regulatory gap highlighted is relevant to the forward-looking function of this inquiry. Section 26(1)(b) of the 2016 Act permits recommendations concerning reasonable precautions, improvements or new systems of working, or other steps which might realistically prevent deaths in similar circumstances. Such recommendations are discretionary and forward-looking.

[142] In the circumstances of this case, the external scrutiny brought by a requirement for an AALA license, may have exposed the absence of a sufficiently site-specific risk assessment.

[143] With that background, I recommend that the Health and Safety Executive, in conjunction with AALA and any relevant government departments, undertake a formal review of whether commercially provided riverboarding for persons under 18 should fall within the adventure activities licensing regime. That review should specifically consider whether riverboarding can properly be brought within the existing interpretation of the statutory water sports categories or whether legislative amendment is required. Ms Kelly suggested that the present exclusion is a consequence of the interpretation of existing definitions, rather than a considered conclusion that independent licensing scrutiny is unnecessary for this activity.

[144] I do not go further and recommend that riverboarding must be made licensable. The recommendation is one of a formal review, rather than prescribing the outcome of that review.

[145] I further recommend that, pending the outcome of that review, the Health and Safety Executive consider whether specific guidance should be issued to providers of organised riverboarding events for children, drawing attention to the fact that the activity is presently outside AALA licensing requirement. Such guidance should emphasise the need for appropriate and rigorous risk assessment of site-specific hazards by all organisations involved in organising events of this nature.

[146] I emphasise that those recommendations are not founded upon a conclusion that AALA licensing would have prevented Kayden's death. They arise because the evidence disclosed a category of potentially high-risk adventure activity involving children sits outside an established system of safety management licensing. A review of that position, and clear interim guidance, are proportionate forward-looking steps which might realistically assist in preventing deaths in similar circumstances.

PART III – RUARIDH STEVENSON

A. Background

The deceased

[147] Ruaridh Stevenson was born on 22 September 1984 and was 39 years of age at the time of his death. He and his wife were business partners.

[148] Mr Stevenson was an experienced outdoor instructor and canyoning guide. His training records confirmed that he had undergone formal canyoning training, including successful completion of the Canyoning Guide 2 course in 2020.

[149] In October 2023 Mr Stevenson and his wife established Adventure Logic Ltd. Mr Stevenson was a director of the company and instructor within the company. The business traded to the public as “Scotland's Canyons” and specialised in private canyoning tours and experiences at locations throughout Scotland. Members of the public could obtain information and make bookings through the company's website.

[150] Dollar Glen was one of the locations from which Mr Stevenson regularly operated. He had been seen there on several occasions by National Trust for Scotland staff and others while taking clients through the glen.

[151] The evidence from those who encountered Mr Stevenson was generally favourable as to his experience and approach. Laura Livingstonee, the Ranger based at Dollar Glen, knew Mr Stevenson from his repeated use of the glen and understood that he had operated there for several years. Peter Carroll, a National Trust volunteer, knew him as a canyoning guide who regularly worked from the glen and described his reputation as being that of one of the safer guides operating in the area. That

background is relevant when considering the decisions made on 13 April 2024 as they were decisions made by an experienced and qualified guide familiar with the locus, rather than by someone unfamiliar with either canyoning or Dollar Glen.

The booking of 13 April 2024

[152] The booking which ultimately led to the excursion of 13 April 2024 originated as a birthday present for Lucy Pringle. Ms Pringle had been given two vouchers for a canyoning experience for her twenty first birthday by her step-grandmother, Alison Gilderoy. Mrs Gilderoy gave evidence concerning her original purchase of the vouchers. She had found the company's website and telephoned Mr Stevenson, speaking with him at some length. She formed the view that the business was reputable and that Mr Stevenson was appropriately qualified and experienced. Her evidence was that she came away from that discussion reassured that Lucy would be in safe hands.

[153] Ms Pringle's birthday was in January 2023. The vouchers were not used immediately and were valid for around 18 months. As the expiry date approached, she and her sister, Jessica Pringle, agreed to use them together. Lucy Pringle then made the booking for Saturday 13 April 2024. Both the Pringle sisters had previously taken part in canyoning activities, although never at Dollar Glen. Both are competent swimmers.

B. Canyoning and Dollar Glen

Canyoning

[154] Canyoning is an adventurous outdoor activity involving the descent of a river, gorge or canyon by following the natural water course. It combines several disciplines, including walking, climbing, swimming and the use of ropes. Participants may negotiate waterfalls and other vertical features by downward climbing, sliding, jumping, abseiling or using zip line techniques. The activity requires a combination of movement skills, water competence and rope handling techniques, with the method of descent selected according to the terrain and water conditions encountered.

[155] Canyoning is a relatively recent commercial adventure activity in the United Kingdom, although its popularity has increased substantially over recent decades. Because canyoning takes place in confined natural water courses, the character and difficulty of a route can alter significantly with rainfall and water level. Features which may be straightforward in low water can become substantially more hazardous when flows increase.

Dollar Glen

[156] Dollar Glen is situated in Clackmannanshire and is owned and conserved by the National Trust for Scotland. It is open to the public and is known for its wooded gorge, waterfalls and walks. The National Trust does not itself operate or regulate the commercial canyoning businesses using the glen. The public have a general right of

access to the glen, and the National Trust does not control who may use the waterways for canyoning.

[157] Physically, Dollar Glen is a steep sided canyon through which the Dollar Burn flows. The route includes narrow sections, waterfalls, rocky ledges and plunge pools. One of its best-known features is the pool variously referred to as the Witches Cauldron or the Devil's Cauldron ("the cauldron"). It is a plunge pool situated beneath a waterfall. The cauldron is approximately 3 metres deep and 2 metres wide, bounded by rock.

[158] Heavy rainfall can transform the character of the canyon quickly, producing heavy waterfalls and turbulent pools. In ordinary water conditions the canyon is widely used commercially and is generally regarded as suitable for introductory or intermediate canyoning.

[159] The hydraulic characteristics of the cauldron are particularly important. As water levels rise the water in the cauldron becomes increasingly aerated. That aeration has the effect of reducing effective buoyancy, and the shape of the pool can create a circulating current which draws a person back towards the waterfall rather than allowing easy escape downstream. Benjamin Case, the co-owner of another canyoning company, described the high-water condition as one in which the pool visibly "bubbles", with reduced buoyancy and strong recirculation making self-extrication difficult without assistance. His evidence was that when that recirculation is present his company does not use the feature. The water level is critical at Dollar Glen, as it can materially alter the difficulty level of the route and its features.

Grading

[160] There is a grading system widely used for canyoning which gives participants and guides an indication of the canyon difficulty. The grading will substantially change during or after heavy rainfall. The grading system adopted in the UK is the FFME system (Fédération Française de la Montagne et de l'Escalade) which is commonly used throughout the world. Mr Yates, Director of the UK Canyoning Association, explained that the grading system consists of three technical grades – a verticality grade, an aquatic grade and a commitment level grade.

[161] Dollar Glen is widely graded as V3A3ii. Mr Yates explained that grade is consistent with calm water swimming and manageable jumps or slides and noted that such grades are typical of commercial canyoning venues. The important qualification is that the grade describes the canyon under particular conditions. Rainfall and increased flow can materially increase the difficulty beyond that ordinarily associated with the venue.

Commercial canyoning at Dollar Glen

[162] Commercial canyoning has been established at Dollar Glen for many years. Mr Case had been working in the glen for about a decade and described using it regularly over the summer months for commercial trips, training and recreational canyoning. The National Trust Ranger estimate was that at least six different companies have operated there in recent years for canyoning purposes.

C. Weather and Water Conditions

Rainfall and Weather Conditions Before 13 April 2024

[163] In the period immediately preceding 13 April 2024 there had been several days of heavy rainfall in the Dollar area. On Friday 12 April 2024 Mr Stevenson and his wife attended Dollar Glen to survey the landscape and watercourse following the recent heavy rainfall. Mr Stevenson must have been personally aware that the burn was carrying elevated water.

[164] By coincidence, Benjamin Case had also attended Dollar Glen on 12 April 2024. He was there to deliver a UK Canyoning Association level 2 guide course to a group of already experienced canyoners. Mr Case had extensive familiarity with Dollar Glen. On arrival he considered the water level to be too high for the intended session and close to being unsafe. Further rain was forecast. He described the conditions as more consistent with an aquatic grade of A4 or A5, as opposed to the A3 grade normally attributed to Dollar Glen. He ultimately decided not to take the group into the canyon and relocated the course. His assessment was based upon visual inspection as opposed to any other data. Mr Case could not recall whether he had actually seen the cauldron that day.

[165] Tim Davis, George Yates and Benjamin Case were substantially aligned on one important point, that being that as a result of the elevated water level the power of the cauldron hydraulic had significantly increased. Once a person became caught in it, self-rescue was highly unlikely even for an experienced canyoner. Mr Yates was of the view that the volume of water present had moved the canyon beyond the safe aquatic grade

at which a normal commercial trip should have proceeded, and that postponement would have been the appropriate response.

[166] Taken together, the evidence points not simply to high water in a general sense, but to a material change in the hydraulic character of the cauldron, with increased aeration, stronger recirculation and a reduced opportunity for escape or rescue.

D. The events of 13 April 2024

Initial meeting

[167] Lucy and Jessica Pringle arrived at Dollar Glen and met the deceased in the car park near Castle Campbell. Mr Stevenson was alone and was to act as the sole guide for his two clients.

[168] Each sister was provided with a wetsuit, helmet and water footwear. Ropes and harnesses were carried for use during the activity. The sisters were not provided with buoyancy aids. Mr Stevenson was wearing a wetsuit and helmet.

Safety documentation and briefing

[169] Before setting off, Mr Stevenson provided the sisters with access to the company's safety and participation forms by means of a QR code. They completed these forms on their mobile phones. The documentation sought information concerning matters such as health, fitness and suitability for participation and included an acknowledgement that canyoning was an adventure activity involving risk.

[170] As they walked into the glen, Mr Stevenson spoke with the sisters about their previous canyoning experience, their confidence in water and how they were feeling physically. He discussed the river conditions and said the water had been high following recent heavy rain, but he believed the levels were falling.

[171] At the first practical section of the route, Mr Stevenson introduced them to the water in a shallow area and had them move around so that they could acclimatise to the temperature and become accustomed to moving while wearing the equipment. He then rigged a rope to a tree and demonstrated abseiling. Both sisters practiced that technique on dry ground for approximately 20 minutes.

[172] The group thereafter progressed further into the canyon where they practiced movement in the water and techniques for passing smaller rock features. The evidence suggests that the early part of the excursion was being used both as instruction and as an ongoing assessment of competence before more difficult features were attempted.

The cauldron

[173] The first significant obstacle which the group encountered was the cauldron. The group approached the waterfall immediately above the plunge pool. Mr Stevenson first demonstrated the intended method of descent himself. He entered the waterfall, descended into the pool and was able to exit to the side without apparent difficulty. He then asked Jessica to throw his bag down into the pool. The bag resurfaced and was recovered by him.

[174] He instructed Jessica to descend. She entered the waterfall in essentially the same manner as Mr Stevenson had demonstrated. On entering the pool, she became submerged and did not immediately reappear. She remained submerged for a few seconds at which time Mr Stevenson appears to have observed she was in difficulty and entered the pool to assist her. Lucy remained above the waterfall at that stage.

[175] Both Mr Stevenson and Jessica then became caught in the powerful current within the pool. Lucy saw them repeatedly disappear beneath the water and resurface briefly. They attempted to hold onto rocks, but the force of the water repeatedly drew them back towards the waterfall.

[176] Lucy began to make her way down the side of the gorge towards the pool. She opened Mr Stevenson's bag and located a rope which she intended to use to assist them. Before she could use it, Jessica was moved into a part of the pool from which Lucy was able to reach her. That resulted from the current moving Jessica rather than a controlled self-rescue. Jessica was gasping for breath. Lucy entered sufficiently far to pull her sister towards the rocks and out of immediate danger. Jessica was then able to escape from the cauldron.

[177] Lucy turned her attention to Mr Stevenson. She saw him resurface and make eye contact with her. She threw the rope towards him, but the current carried it away before he could secure it. He was pulled beneath the water again. Approximately 45 seconds later he resurfaced, unconscious, and was carried towards the side of the pool. Lucy took hold of him but could not remove him from the water unaided.

[178] At this time two other walkers happened upon the scene, Adrian Hambury and Christine Cattanach. Mr Hambury climbed down into the gully and assisted Lucy in getting Mr Stevenson out of the water and on to the rocks. Lucy and Mr Hambury immediately commenced CPR. Mr Stevenson's lips were blue. Ms Cattanach phoned 999.

[179] At about 10.20am Laura Livingstone and Peter Carroll were alerted to events by a passing walker. Mr Carroll made his way to the cauldron, recognised Mr Stevenson and assisted at the scene. He spoke to an emergency call handler and then returned towards Castle Campbell car park to help guide responders into the glen. Paramedics and police officers arrived at the car park at around 10.40am and were then guided on foot towards the cauldron. The walk from the car park to the cauldron took around 15 minutes.

[180] The location presented significant access difficulties. The glen is a steep and wooded gorge with restricted vehicle access. Rescue personnel required to approach on foot over uneven ground while carrying equipment. Those features complicated access to Mr Stevenson and his subsequent extraction. The emergency response was nevertheless substantial and well-coordinated. There was nothing in the evidence to suggest that the emergency response was inadequate.

[181] Because of the steep and confined terrain, Mountain Rescue and the Scottish Fire and Rescue Service attended. An air ambulance response was arranged with a view to evacuation should Mr Stevenson regain spontaneous circulation. Resuscitation efforts continued for more than an hour. Despite the efforts of all involved, Mr Stevenson remained unresponsive. He was pronounced dead at 1144 hours on 13 April 2024. His

body was subsequently recovered from the cauldron by a joint operation involving mountain rescue and the fire service.

E. Cause and mechanism of the accident

Post-mortem examination

[182] A post-mortem examination was carried out on 19 April 2024 by Dr Tracy Sorkin and Dr Thomas Prickett. The cause of death was certified as 1(a) drowning.

[183] The pool lies immediately below a waterfall and, in the elevated water conditions which prevailed that day, the incoming water was turbulent and heavily aerated. The effect of aeration is to reduce buoyancy available to a person in the water. The flow of the water and architecture of the pool created a recirculating hydraulic which drew water, and anyone caught within it, back towards the point at which the waterfall entered the pool, rather than allowing an uncomplicated escape downstream.

[184] The expert evidence was consistent in that the heavy rainfall and elevated water levels had materially increased the strength of those hydraulic features. The expert evidence also concurred that the volume of water present had moved the feature beyond the conditions in which an ordinary commercial canyoning descent ought to have proceeded.

[185] On the evidence, self-rescue once caught within the hydraulic was highly unlikely. That conclusion does not depend upon any lack of experience or swimming ability. Mr Stevenson was an experienced canyoning guide and had already descended and exited the feature without difficulty moments earlier. But once a person becomes

caught within the strengthened recirculating hydraulic then present, even an experienced individual would have great difficulty escaping without assistance. Jessica's escape occurred through the movement of the current rather than due to swimming ability.

F. Material issues

Whether the canyoning trip should have proceeded

[186] Canyoning is an activity undertaken in moving water and the presence of substantial flow does not, of itself, render a canyon unsafe. Nonetheless, Mr Case's evidence provides important context. He was highly familiar with Dollar Glen, and even with a group of experienced canyoners, he considered the water too high to undertake the activity.

[187] Considering the evidence as a whole, the excursion on 13 April should not have proceeded through the cauldron. The critical consideration was not simply the depth of the water but also its volume and energy as it entered the plunge pool. The objective conditions at the cauldron were such that the margin for error was substantially reduced. The appropriate course would have been to postpone the excursion, relocate it, or omit that feature.

Risk assessment

[188] The inquiry had access to several documents obtained from Adventure Logic Ltd during the subsequent investigation. These included a risk assessment specifically

prepared for the event of canyoning⁹. That document is neither signed nor dated. There is no reference to the risk of drowning in the document. Mr Davis highlights that there is no reference to additional risks, such as cold-water immersion, hypothermia, strainers and foot entrapments, and the measures to be taken to eliminate the risks associated with them. The document is generic in character and lacks any site-specific detail. It fails to reference the cauldron or set out how it is to be managed.

[189] The risk presented by the cauldron under ordinary flow conditions is materially different from that presented when a high volume of water is entering the plunge pool. A suitable site-specific assessment requires that distinction to be recognised. Moreover, the risk assessment should specify the circumstances in which the feature ceases to be suitable for commercial clients.

[190] That omission is more than a deficiency in paperwork. A risk assessment has operational value only if it assists the person making the decision at the venue. The absence of specific reference to the cauldron and water levels meant that the decision to proceed was simply a subjective judgement made on the day. In my view, the failure to provide a site-specific system for assessing the changing hydraulic risk at the cauldron amounted to a defect in the system of working.

[191] Mr Yates' evidence concerning operational water levels is persuasive in this respect. He considers that an operator's standard procedures should define an operational water level and a cut-off point for each commercial venue. That need not

⁹ Crown production number 36.

involve sophisticated instrumentation. A cut-off may be based upon a fixed visual reference such as a gauge or other identifiable feature. If the level reaches, or is scheduled to reach, that point then the trip should be cancelled, rescheduled or relocated. I accept the substance of that evidence. He suggests that, as a matter of good practice, such levels should be reviewed and validated by an independent technical advisor. I will make recommendations to reflect those suggestions.

Solo guiding

[192] Mr Stevenson was the only guide accompanying the two clients. There is no basis for concluding that canyoning must always be conducted by two guides. Mr Yates' evidence recognised that solo guiding can be appropriate, and the UK canyoning association guidance refers to a maximum ratio of one guide to eight participants where the guide is appropriately experienced and familiar with the venue.

[193] The difficulties on this occasion arose from the conditions rather than the numerical ratio. Mr Case's usual practice is to have two guides available at this venue. As a matter of common sense, the existence of a second guide will increase the margin of safety. I am, however, not satisfied on the evidence that the absence of a second guide can be said, on a balance of probabilities, to have caused or contributed to the accident. What a second guide would have done in the circumstances as they unravelled would be a matter of speculation.

Rescue aids, rope use and pre-rigging

[194] There was evidence concerning the rescue arrangements at the cauldron. Once Jessica was in difficulty Mr Stevenson reacted immediately by entering the pool to assist her. I do not criticise his decision to do that. It was an act of significant courage on his part, no doubt fuelled by an instinctive attempt to rescue a client in difficulty. The question arises as to whether there should have been an alternative means of rescue available at the cauldron.

[195] The Crown submits that a reaching aid, such as a pole or a suitable branch, might have been positioned for immediate use, and could have been pre-rigged in advance. Such arrangements would accord with the general rescue principle of preferring “reach or throw” techniques before committing a rescuer to water. Mr Case referred to the possibility of “live bait” rescue, ie being physically tethered to a safety line held by an anchor point. He conceded, that with the force of water that day, it would have been challenging to pull a person out with a rope.

[196] If the cauldron is to be accessed in forceful conditions as happened that day, the availability and deployment of an effective bank-based rescue system does require careful consideration in advance of the event. Had such a system been available it might realistically have enabled assistance to be given to Jessica without Mr Stevenson entering the hydraulic. It may also have provided him with an external means of support or extraction once he did enter the water. I am satisfied that it is a precaution that might realistically have avoided the death.

Emergency communications

[197] The Pringle sisters did not have their mobile phones. They had been left in Mr Stevenson's vehicle. They had not been given any information on what to do in the event of guide incapacity. Passers-by ultimately enabled the emergency call. That was a weakness in the arrangements. Despite that, on the evidence, I do not conclude that an earlier or different call would have prevented the death, given the speed of the drowning process and the difficulty of access for the emergency services.

Warning signage

[198] There was no warning signage at the cauldron addressing dangerous water, the risk of drowning or, more specifically, the hazards created by highly aerated and recirculating water. The Crown submitted that targeted signage could perform a useful preventative function, particularly for members of the public who might not appreciate that a plunge pool of this kind can become significantly more dangerous following heavy rainfall. Mr Davis considered that signage could be useful and expressed the view that it could do no harm "and may save a life", although he accepted that its effectiveness depended upon people paying attention to its terms.

[199] The National Trust for Scotland advanced a contrary argument and suggested that the evidential basis for any recommendation was weak. It pointed out that features of this kind are not unique to Dollar Glen, that there had been no evidence to demonstrate the effectiveness of signage, and that it is unrealistic to expect warning signage to be erected at every natural hazard.

[200] Lucy Pringle gave evidence that if there had been a warning sign it may have made her more apprehensive, but she would still have trusted Mr Stevenson's judgement. In my assessment, this reflects the most likely approach that people would take, that being they are likely to defer to their instructor rather than signage.

[201] There was evidence that the canyon is being used by persons other than organised canyoning groups. Laura Livingstonee described it as popular both with canyoners and with local children jumping into the water. She referred to having seen people from Dollar and elsewhere at the cauldron including children. She gave evidence of fencing having been erected at one part of the canyon following the death of a child several years ago.

[202] It is quite clear that the absence of signage did not contribute to this particular accident and nor did I understand the Crown to make that argument. Mr Stevenson was an experienced canyon guide who knew the feature and a general warning sign would not have added materially to the information already available to him. The absence of signage does not fall within section 26(2)(e). It is not a precaution which might realistically have resulted in the death being avoided.

[203] The position is different when the matter is considered prospectively. The evidence made the inherent danger of this particular feature crystal clear. The cauldron is a confined pool which can become highly aerated, materially reducing buoyancy and making self-rescue extremely difficult. Those characteristics are not obvious to an uninformed member of the public. The cauldron is accessible and has been used informally by adults and children. In those circumstances, I am satisfied that the

statutory test for a recommendation in terms of section 26(1)(b) is met. I recommend that suitably positioned warning signage be erected at or close to the cauldron, identifying the particular danger presented by aerated and recirculating water, especially following periods of heavy rainfall. That measure is targeted at the specific hazard that is the cauldron. The recommendation is not based upon any conclusion that every natural hazard requires signage. It simply acknowledges the combination at this site of a serious but not readily apparent danger, unrestricted public access and evidence of informal recreational use.

External regulation and industry oversight

[204] The excursion of the 13 April 2024 was not subject to the AALA regime.

Canyoning can be licensable in some circumstances where it falls within the statutory definition of climbing, but only when the activity is being provided to persons under 18 years old. The Pringle sisters were adults and so this activity was not licensable.

[205] There is force in the evidence of Mr Davis and Mr Yates that external scrutiny can expose deficiencies which may not be apparent to the person who devised the system. They identified the risks of confirmation bias and normalisation of deviation where a small operator relies upon its own previous experience without independent challenge. Those considerations support the recommendation made in relation to the possibility of independent technical review.

[206] Regulation or accreditation is not a guarantee against an accident. Ms Kelly was clear that even where a licence is required that does not mean the AALA will supervise

activities in real time or assess water conditions on the day. Responsibility for deciding whether a particular trip should proceed remains with the provider. I do not conclude that the absence of external regulation was itself a cause of Mr Stevenson's death. The more immediate control lies within the provider's own system of work. Had the suggested system of an objective water level reference cut-off point been in operation that day, the decision to proceed would not have been based solely upon a subjective assessment. External regulation would not itself have affected that operational decision.

Postscript

[207] The inquiry wishes to record its thanks to Detective Constables Cara Cargill and William Hogg, who assisted with locus visits. Their assistance enabled all participants to access both locations safely which allowed for a greater understanding of the physical context of these accidents.

[208] I am grateful to parties for their professional preparation and presentation at this inquiry, and especially their focus on what evidence could be agreed which significantly truncated the number of witnesses that required to be called.

[209] Two families have lived with the consequences of these deaths for a number of years. I wish to conclude this determination by expressing my sympathies and condolences, along with all the parties who appeared at the inquiry, to the families of both Kayden Walker and Ruaridh Stevenson.