

# A strategic approach to reducing emergency incidents resulting from cliff jumping in Wales

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# 1. Introduction

Cliff jumping is the act of jumping into the sea or other bodies of water from a high jumping platform in a variety of locations — coastal, countryside, urban, manmade; there is an element of freestyle to it with multiple flips and twists. Whilst known by some as just ‘jumping’ or ‘tombstoning’ (due to the posture of the body on entry to the water — straight, upright & vertical), this report will use the preferred terms of either ‘cliff jumping’ or ‘jumping’.

Cliff jumping is a high-risk, unregulated activity, undertaken by unsupervised individuals, with associated hazards that include:

- Varying water depths - At coastal sites water depth alters with the tide. In inland waters water levels can vary with rainfall; the water may be shallower than it seems
- Underwater objects - Submerged objects like rocks and debris may not be visible; they can cause serious injury if you jump onto them
- Conflict with other water users including swimmers, paddlers and boaters
- Cold Water - The shock of cold water may make it difficult to swim
- Currents - Strong currents can rapidly sweep people away

Cliff jumping has been taking place for generations in some locations, however, it is under increasing media and public scrutiny due to wider coverage of the risks involved. The sharing of video clips of jumps via social media has led to increased awareness and participation. RoSPA cites hospital episode data from 2004-2008 during which there were 139 incidents requiring a rescue or emergency response, 12 of these ended in a fatality. Of the 41 most serious cases, the participants were predominantly male; just over half were teenagers, 25% were in their 20s and the remainder were aged 30+. All of the known alcohol related incidents involved males over the age of 40. Of the non-fatal incidents, spinal and limb injuries were the most commonly reported. There is a need for more up-to-date data for Wales and for specific problem locations.

The decision of whether to jump is down to the judgement of those taking part and the recognition of the risks involved is often not adequate. There may be several reasons for this; there is little by way of direct advice for would be participants, the little advice available is often hard to access, so those who are likely to participate (especially teenagers) are strongly influenced by information on social media which may not acknowledge the risks and often glamorise the activity. In many incidents judgement has been impaired by alcohol and/or drugs.

The 'rewards' of jumping as a driver for undertaking the activity have to be recognised. The illicit nature of doing something which is dangerous; the thrill and adrenalin rush from a successful jump; the high regard from companions, peers and social media followers are all factors which negate the impact of traditional approaches to safety communications. There was a national initiative undertaken by RoSPA in 2007 'Don't jump into the unknown' and there are regular local initiatives and news coverage normally prompted by incidents which have resulted in fatalities or life changing injuries. This study recognises the important work that has been done to identify and disseminate the messages but suggests that further consideration is required of the most effective interventions to communicate these messages to target audiences. It is not practicable to prevent participation in this activity, instead this project proposes a proportionate approach which provides opportunities for potential participants to inform themselves about the risks.

## 2. Aim

The overall aim of this project is to develop a communication strategy to reduce the number of emergency incidents arising as a result of cliff jumping throughout Wales.

## 3. Methodology

1. Information (location, frequency and nature of the activity and any recorded incidents) was requested from stakeholders (Police, Fire and Rescue Services, RNLI, local authorities) regarding locations where cliff jumping regularly takes place.
2. Those sites which were identified by stakeholders as of 'serious concern' with regard to cliff jumping were shortlisted.
3. In discussion with stakeholders 5 case study sites were identified from the sites of serious concern shortlist.
  - I. Coastal: Llangland Bay to Limeslade Bay
  - II. Inland: Sgwrd Gwladys (Pontneddfechan, Glynneath)
  - III. Manmade/Urban: Cardiff Bay
  - IV. Quarry: Burley Hill (Llanferres)
  - V. Site with history of interventions: Tenby Harbour (no site visit)
4. Sites I-IV were visited in order to conduct a risk analysis. In addition key stakeholders were consulted via follow-up meetings after each site visit. An online search was conducted to review available information for each site.

5. A review of social media activity concerning cliff jumping in Wales was conducted.
6. The learning from the case studies was used to inform a generic communication strategy for Wales.

## 4. Data collection and analysis

A total of 51 cliff jumping sites were identified in Wales and of those sites, 28 sites were identified as sites of serious concern (sites where there has been significant increased footfall, serious injuries and/or fatalities) (Table 1). The location of these sites is shown on Maps 1 & 2.

Table 1

	Coastal	Inland	Quarries
	18 sites	3 sites	7 sites
<b>South East Wales</b>	1 Swansea 1 Bridgend 2 Cardiff	1 Neath Valley 1 Brecon	1 Monmouthshire
<b>South West Wales</b>	10 Pembrokeshire		
<b>North Wales</b>	3 Anglesey 1 Conwy	1 Conwy	3 Gwynedd 3 Flintshire



## 5. Case Studies: Site descriptions of case study sites

### 1. Coastal site - Llangland Bay to Limeslade Bay (Gower, Swansea) Grid Reference: SS 61595 86969

A sea cliff site, popular for jumping particularly by locals. Known locally as 'nightmares' and seen as a 'rite of passage' activity and location for locals, who's grandfathers, fathers and friends have all jumped here. It is centrally placed between Llangland Bay and Limeslade Bay. The site can be accessed from both the east and west, following the well defined coastal path for approximately 15 minutes but those who are visiting the site intent on jumping are more likely to have parked at Llangland Bay, spent some time on the beach and then made a conscious decision to jump from 'nightmares'.

Swansea Council manage all of their beaches and have a team that manage the Wales Coast Path (WCP), as well as a team responsible for water safety within the local authority. The council are aware of a few sites where jumping has and occasionally continues to take place. They have actively intervened at 'Nab Rock,' which is a site where boats access the water, by introducing railings that prevent the run up that was needed to gain entry to the water. An assessment of the risks and associated hazards with regard to cliff jumping has not been carried out for the known sites.

The approach to the case study cliff jumping site, whilst not obvious from the path due to undergrowth, is a scramble. At busy times, young people are known to leave their bikes at the approach to the site, adjacent to the WCP, either to observe the jumping or to jump themselves. Winter storms have eroded the access path, leaving a deep and steep, actively eroding, loose and unstable open drainage ditch. Personal Protective Equipment (PPE) and a fixed 20 metre



Looking down the eroded descent path to top of the crag



View looking down from top platform.

hand line were used during the site visit to access the top of the cliff although this is neither used or available to those who use this site for jumping.

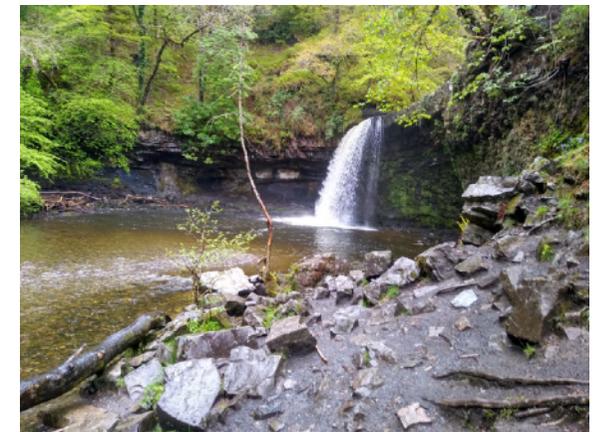
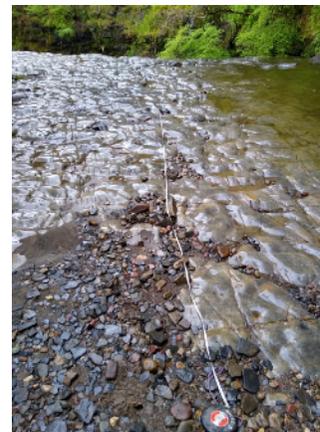
The top of the cliff is c.6 metres wide with a near vertical face (c.16 metres) on the west facing side and a steep sided inlet/zawn formation on the east side. The top of the cliff falls away towards the sea at a relatively shallow/gentle angle with no obvious footpath. The way down to a lower wave cut platform consists of uneven sharp limestone with significant rock debris c.25 metres from the top of the cliff, the angle of rock steepens into a step of c.6 metres, followed by a c.10 metre vertical section.

The site has a number of 'take off' points, all with a jump height of c.16 metres (subject to tidal range) but requires an outward jump in excess of c.3 metres to have any chance of clearing the large rocks at the base of the cliff and jump site (some up to 4 metres in height from the wave cut platform). This site has the second highest tidal range in the world so the amount of water beneath the jump site varies considerably both between high and low water but also between 'spring' and 'neap' tides. Exiting the water to regain a position back at the jump site appears to be problematic with barnacle coverage across the main rock face to a height of c.6 metres from the bottom of the wave cut platform.

The site appears to attract mainly locals who will have limited and high risk options from which to view what is going on. In the event of an incident at this location, the quickest way to assist a casualty would be to jump in, which given what would have preceded, would not be the safest option. There is mobile phone reception at the site and locals would be aware of their location to pass onto the emergency services. Access to the site for the emergency services would be best placed from the water, although that would still be challenging.

## 2. Inland site - Sgwd Gwladys (Pontneddfechan, Glynneath) Grid Reference: SN89602 09323

Sgwd Gwladys (Lady Falls) is a 10 metre high waterfall with a large shallow plunge pool, situated on the Afon Pyrddin close to the village of Pontneddfechan. The site is popular with visitors, particularly during the summer months, with many people wild swimming in the plunge pool or sun bathing on the shale bank. Anecdotal evidence suggests that the visitor profile is changing and is made up of local youngsters with a knowledge of the site, day trippers and those holidaying in South Wales who have travelled from major urban conurbations. There appears to be an increase in the number of people from ethnic minority



backgrounds who have a different knowledge and understanding of the risks of being in and around water.

Sgwd Gwladys is situated within the Brecon Beacons National Park and has easy 'on foot' public access from the village trailhead behind the Angel pub and restaurant in Pontneddfechan. It's a 30 minute walk along the riverside 'Elidir' trail to the waterfall along a public footpath, which is fairly level and suitable for all. The return journey can be made on the trail on opposite side of the river, although there are some steep sections. The 'Elidir' trail continues to Pont Melin Fach, the trail is steep and uneven after Sgwd Gwladys. Whilst public access exists along the first section of 'Elidir' trail, it is on private land, following a public right of way. Where the path crosses the Afon Pyrddin close to the waterfall, the land owner is Natural Resources Wales (NRW) and the land is dedicated as open access on foot under the Countryside and Rights of Way (CROW) Act 2000. The waterfall being in the river is shared ownership, but the jump site itself is on NRW managed land. As land managers, NRW have risk management systems in place for walking activity in the area, particularly for the 'Elidir' trail.

There is a large (12.6 metres wide) 'take off' area of good clean rock at the jump site, forming a clean rock edge to the waterfall/cliff. Moving back from the waterfall edge there is a clear area in length of 14.8 metres, which provides a significant area to run and gather speed prior to the jump, albeit in wet conditions, this area may be slippery. The depth of water in the plunge pool on the day of the site visit appeared to be at its maximum potential depth, given a sustained period of rainfall preceding the visit and heavy rainfall during the visit. The waterfall is undercut, which has resulted in loose boulder deposits within 3 metres of the cliff edge at water level, presenting shallow water of up to two metres. From this point, the water depth increases to between 3.5 and 4 metres. Surrounding the plunge pool are blocks of rocks, with evidence of large blocks randomly located in the deepest part of the landing area. The shale banks to the far side of the plunge pool provide an easy exit for anyone in the water.



### **3. Manmade / Urban site - Cardiff Bay (Cardiff) Grid Reference: (see specific sites below)**

Cardiff Harbour Authority (CHA) was established on 1st April 2000 and took over the statutory responsibilities from Cardiff Bay Development Corporation (CBDC) as set out in the Cardiff Barrage Act 1993. Cardiff Bay is a freshwater-fed, enclosed bay in the centre

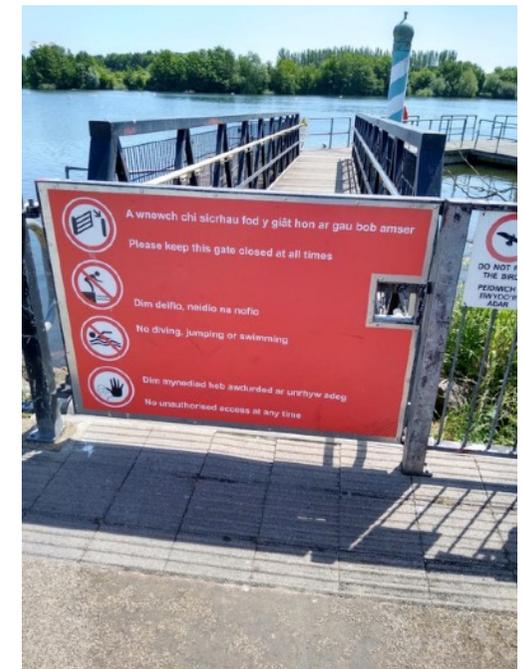
of Cardiff owned by Cardiff Council, managed by the Harbour Master and Cardiff Harbour Authority, who have statutory responsibilities for the River Ely and River Taff and the Bay, reaching as far as Ely Bridge on the River Ely and Blackweir on the River Taff. The Bay and the rivers that feed it are fully operational with water craft ranging from sail and motor boats, paddlecraft and commercially operated water buses / trip boats.

CHA's management of any sport that requires or poses a risk of immersion is strictly managed to ensure the continued public health of all who use the Bay. As such 'swimming' is currently only permitted by the Harbour Master under the CHA Bye-laws whereby it is strictly managed and when water quality permits such as a Triathlon event or the Licenced Aquapark. There have been fatalities and serious incidents resulting in life changing injuries within the Bay and rivers as a result of unauthorised swimming and jumping.

Whilst unauthorised swimming can happen anywhere within the Harbour, the main sites where entering the water either by jumping or for swimming are:

- Graving Dock - Grid Reference ST 19012 74262
- Barrage Embankment adjacent to the Sailing Centre - Grid Reference ST 19254 73485
- Blackweir - Grid Reference ST 17077 78029

There is public 'on foot' and cycling access to virtually all areas of Cardiff Bay and river banks within the statutory Harbour limits, with vehicle access and car parking close by. Access to all of the sites highlighted is therefore very easy, with no obvious hazards except the weir. Given its location at the heart of Cardiff, the footfall to Cardiff Bay is significant (in excess of a million people a year to the barrage), some of whom will have spent time in the nearby bars and restaurants; swimming and jumping under the influence of alcohol has been a problem.



CHA run water safety campaigns informing the public and school children about the dangers of swimming and jumping in the Bay and on the rivers. Unintentional, unauthorised and deliberate access to the water is the second highest hazard in the harbour's Hazard Management System. The CHA actively work with partners in the emergency services, RLSS and RoSPA regarding drowning prevention and education to reduce the risk posed by swimming within a harbour and the associated on the water and underwater hazards that exist. They are also part of the local Water Partnership forum.

CHA's partnership with the Arts and Business Water Safety Schools Initiative and the Aquapark group form part of CHA's initiative to educate against unauthorised swimming and provide safe and managed access to the water. During the first year of the water safety schools initiative in 2017 and the first Aquapark season in 2019 they saw a reduction in unauthorised swimming within the harbour.



#### 4. Quarry site - Burley Hill (Llanferres, Mold, CH7 5LS) Grid Reference: SJ 20370 61610

Burley Hill is an inactive limestone quarry site, owned and managed by Tarmac. At its highest point, the quarried expanse sits c.75 metres above the water level, with a further c.40 metres of excavation below the water level. The face of the quarry is stepped at 15-20m intervals, with inclines between each one. These steps (benches) that run around the quarry face, enabled vehicle access so that the rock could be removed when the site was being worked. These operations ceased in 2003. Evident throughout



the site are past and very recent rockfalls, some of which have been full height, whilst others have been halted at the next 'bench', resulting in very loose and unstable rock and debris over which cliff jumpers would need to negotiate.

There is vehicle access to the site, via a tarmac road and three gates, all of which are locked at all times. Vehicles are often found parked close to the first gate and the visitors continue on foot. All of the gates have a varying degree of signage. At the innermost gate there are ten signs, with mixed styles and messages as follows:

- Keeping Wales' Communities Safe Around Water. Key Messages focussing on how to swim safely. (x2 English and Welsh)
- Private Property: Trespassers will be prosecuted (x2)
- Warning CCTV in operation (x2)
- Danger - Deep Cold Water: Do not Swim. Caring for your safety (x1)
- Danger - Blue green algae present in water. Toxic. Do not swim (x1)
- Danger - Quarries are not play areas. Stay away
- Danger - This site is not a play area. Stay out. Caring for your safety (x1)

Safety torpedo buoys are in place on site and inspected daily. These items go missing periodically; Tarmac have replacements on site should they need them.

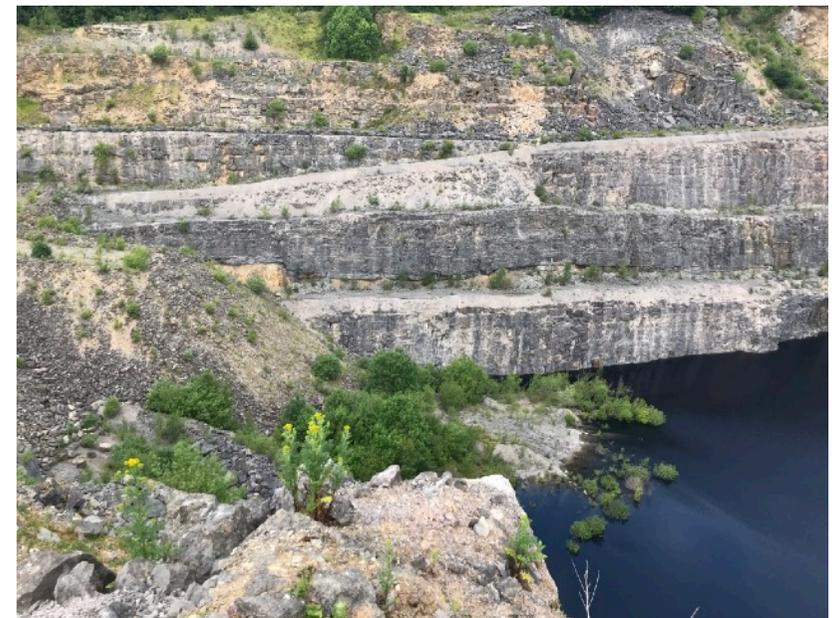
Foot access to the site is via a public right of way that starts at the first gate and circumnavigates the perimeter fence line of the quarry. The fence height has recently been increased from 1 metre to 2 metres in the areas closest to the vehicle access point, after which the fence height remains at 1 metre, interspersed with blackthorn and vegetation growth. There are obvious desire lines where the growth is reduced and the fence is visible, further 'Danger' signs have been placed at these points. Evidence of fence repairs along the fence line indicate that some people turn up suitably prepared to cut their way through the fence. Other evidence indicates that the 2 metre high fence was climbed over. Any damage to the fence is picked up as a result of the daily walking of the boundary by the security guard. In addition, monthly inspections are carried out by a contractor who provides a written report with photo evidence of fences intact and any defects. When identified as a risk to the public, these defects are rectified straight away.



Access to the jump sites, which are either side of the quarry is either along the first level bench which sits at c.10 metres above the water level or over a boulder strewn descent before entering the water and swimming to an exit point. All of the exit points from the water appear to be over loose and unstable ground and through areas of rockfall. The height of both jump sites is c.10m with what appears to be no jump reach i.e. the quarry face is vertical and no apparent obstacles lie in the water beneath. Although, the benches continue beneath the water and it is thought that the next bench lies c.5 metres beneath the surface of the water.

The water is dyed black three times a year (dependant on colour appearance) in order to deter swimmers/jumpers, usually before public and school holidays. Tarmac have indicated that the process of dyeing has been very effective with some trespassers changing their minds after seeing the colour — this has been highlighted by them when questioned. Whilst this anecdotal evidence suggests that dyeing the water is effective, it should be noted that it may also obscure a view of any obstacles that lie beneath.

It is evident that Tarmac take the issue of unauthorised access and cliff jumping seriously and have a risk management system in place that identifies the relevant hazards alongside the appropriate control measures for both the site itself and its perimeter. Its emergency action plan has been developed and tested in conjunction with the North East Wales Search and Rescue (NEWSAR) Team, who also carry out talks to local schools, Girl Guides and Scout groups, etc., to highlight the dangers. In addition, Tarmac work very closely with the local community in a preventative way to assist in reducing the likelihood of incidents involving members of the local community. This includes a yearly leaflet drop at local schools with



information provided by the Mineral Products Association regarding the dangers of bodies of water. Security guard patrols take place every day, up to five times a day with the visit lasting up to three hours, occasionally backed up by police officers as part of local liaison meetings. The security guard is very experienced, with over 10 years experience. In addition, a Tarmac employee visits weekly and once or twice a year, an internal security specialist visits with a view to looking at improvements.

The site attracts people from all over the UK but mainly from Manchester and Flintshire. Some are opportunists whilst others have accessed the site with the intention of jumping. Up to 40 people have been encountered during single visits by the site manager with the norm being 5-10 per visit. The intention of some of these visitors range from having a BBQ, an afternoon out with the family for water activities including swimming and the use of inflatables with the kids, a place to drink alcohol and/or take drugs, as well as cliff jumping. All trespass to the site is recorded on Tarmac's safety online portal, which is reviewed monthly by Tarmac's safety advisors.

In the event of an incident at this location, emergency vehicles would only be able to access the periphery of the site; access to the water would need to be undertaken on foot and would be hazardous and difficult, although possible, as identified when testing the emergency procedures with NEWSAR, who have keys to the site and would be the 'emergency service' requested with any situation within the quarry. Whilst there is no phone reception on site, Tarmac have a very good relationship with the owners of a property located next to the first gate. They also report possible trespassers to the security guard if they are not on site.

## 6. Case Studies: Site details arising from site visits and communications with landowners/managers

Table 2 below compares the 4 case study sites in terms of the information gathered to date regarding environment, frequency and seriousness of incidents, site specific hazards and site specific risks.

	COASTAL	INLAND	MAN-MADE / URBAN	QUARRY
	Langland Bay to Limeslade Bay	Sgwd Gwladys	Cardiff Bay	Burley Hill
Jump height	16 metres (approx.)	10.2 metres	Graving Dock - 3.5 metres Barrage embankment adjacent to the Sailing Centre - beach entry to access pontoons Blackweir/Footbridge – c.3 metres and bank entry	10 metres (approx.)
Jump reach	3+ metres (approx.)	6-8 metres from the lip of the cliff edge to the deepest water in the plunge pool	0 metres	1 metre (approx.)
Tidal range / water depth	Spring tide range is 9 metres. The level of the tide at low tide is estimated at 1 metre below lower platform	3.5-4 metres, with random hidden boulders located around the bottom of the plunge pool	Whilst Cardiff Bay is non-tidal, it is fed by two rivers and the Barrage s designed to cope with an increased bay height of up to 3.5 metres above normal bay level.	The water level may vary within a 1-2 metre range
Incidents in last 5 years	Awaiting further information	7 in the last 5 years in the BBNPA 'waterfall country', 3 of which have been at Swyd Gwladys	Whilst there are numerous occasions when people both jump and swim at Cardiff Bay, and this is largely weather dependent during the summer months.	Whilst there have not been any serious incidents in the last five years, there has been a significant increase in the numbers who visit the site, which offers additional concerns for Tarmac.

	COASTAL	INLAND	MAN-MADE / URBAN	QUARRY
	Langland Bay to Limeslade Bay	Sgwd Gwladys	Cardiff Bay	Burley Hill
<b>Fatalities</b>	Awaiting further information	<ul style="list-style-type: none"> <li>i. July 2019 Gunpowder Works, known locally as Loonies Leap - a 20 year old male traces of drugs and alcohol.</li> <li>ii. June 2021 Sgwd y Pannwr - a 27 year old male.</li> <li>iii. August 2021 Sgwd Gwladys - a 28 year old male got into difficulties whilst swimming in the plunge pool.</li> </ul>	Unknown as information is classed as confidential.	None
<b>Serious Injuries</b>	i. April 2021, a male with life changing injuries.	<ul style="list-style-type: none"> <li>i. August 2016 Sgwd Gwladys - a 22 year old female with lower leg fracture</li> <li>ii. June 2018 Swyd Gwladys - a Male with suspected spinal injuries but okay after hospital examination</li> <li>iii. July 2018 Swyd Gwladys - a 25 year old female with spinal injuries</li> <li>iv. July 2019 Henrhyd - 15 year old with a server leg injury</li> <li>v. August 2020 Swyd Gwladys - a 13 year old with spinal and pelvic injuries</li> </ul>	At least 2 with life changing injuries, although details unknown.	None, although the footfall has increased significantly.

	COASTAL	INLAND	MAN-MADE / URBAN	QUARRY
	Langland Bay to Limeslade Bay	Sgwd Gwladys	Cardiff Bay	Burley Hill
Site specific hazards (identified during the site visit)	<p>Loose and unstable descent path to jump site</p> <p>Falling/dislodged debris</p> <p>Variable water depth</p> <p>Cold Water</p> <p>Submerged obstacles</p> <p>Barnacle coverage at exit locations</p>	<p>Variable water depth</p> <p>Cold water</p> <p>Submerged obstacles</p> <p>Other users – swimmers</p>	<p>Variable water quality – the primary reason swimming is not allowed is because the Harbour is at the bottom of two big urban catchments, both of which contain dozens of sewage discharges. CHA is unable to guarantee the water quality. A decision was made back in 2000 to monitor the water quality of the Bay, thereby only allowing people into the water (for activities with a risk of immersion such as dinghy sailing) when it was of a quality that didn't endanger public health. The standards within the Bathing Water Directive are used as a metric to measure this.</p> <p>Other users – commercial and recreational water crafts</p> <p>Cold water</p> <p>Variable water depth</p> <p>Submerged obstacles</p>	<p>Loose and unstable 'benches'</p> <p>Rockfall</p> <p>Other users – swimmers, inflatable users</p> <p>Variable water depth</p> <p>Cold water</p> <p>Submerged obstacles</p>

	COASTAL	INLAND	MAN-MADE / URBAN	QUARRY
	Langland Bay to Limeslade Bay	Sgwd Gwladys	Cardiff Bay	Burley Hill
<p>Contributing factors</p> <p>NB. according to RoSPA, a minimum depth of water of 5 metres is needed for a 10 metre jump</p>	<p>Daily tidal range will greatly affect the jump height and water depth</p> <p>Weather conditions (wind) will greatly affect sea state (swell and currents), ease of exiting the water and rescue</p> <p>Peer pressure can greatly affect the decision making process</p>	<p>Weather conditions (precipitation) will greatly affect jump height, jump reach and water depth</p> <p>Alcohol and drugs will greatly affect the decision making process</p> <p>Peer pressure can greatly affect the decision making process</p>	<p>Weather conditions (precipitation and wind) will affect jump height, water depth, water state (swell) and ease of exiting</p> <p>Alcohol and drugs will greatly affect the decision making process</p> <p>Peer pressure can greatly affect the decision making process</p>	<p>Weather conditions (precipitation) will affect jump height, water depth and ease of exiting the water</p> <p>Distance between jump site and exit point will greatly affect the amount of time in the water</p> <p>Alcohol and drugs will greatly affect the decision making process</p> <p>Peer pressure can greatly affect the decision making process</p>
<p>Site specific risks (identified during the site visits)</p>	<p>Slipping, tripping and falling during descent to the jump site</p> <p>Drowning</p> <p>Hypothermia</p> <p>Cold water shock</p> <p>Serious/Fatal injuries from impact with water and/or submerged obstacles</p>	<p>Drowning</p> <p>Hypothermia</p> <p>Cold water shock</p> <p>Serious/Fatal injuries from impact with water and/or submerged obstacles</p>	<p>Drowning</p> <p>Hypothermia</p> <p>Cold water shock</p> <p>Serious/Fatal injuries from impact with water and/or submerged obstacles</p>	<p>Slipping, tripping and falling</p> <p>Crushed by rockfalls</p> <p>Drowning</p> <p>Hypothermia</p> <p>Cold water shock</p> <p>Serious/Fatal injuries from impact with water and/or submerged obstacles</p>

## 7. Tenby - an insight into a local initiative past and present

With an ever growing issue of cliff jumping in Tenby, the Breakwater project was established in 2017 and continued through to 2019. The project was designed to tackle an increase in dangerous and anti-social behaviour in the harbour area, centred around young people jumping from the harbour wall. The project was supported by a number of agencies, including Mid and West Wales Fire and Rescue Service, Pembrokeshire Youth Service, Dyfed Powys Police, RNLI, Tenby Sailing Club and a local school. The project consisted of 30 minute workshops delivered by the agencies involved and considered the key messages related to water safety and other dangers specific to Tenby harbour, anti-social behaviour, peer pressure and what to do if someone is injured whilst participating in this activity. In 2017, the project was offered to a small cohort of Year 7 pupils from the local school and included a coasteering activity, delivered by a local adventure activity provider. This engaging approach appeared to have a positive impact on those involved and significantly reduced anti-social behaviour issues during the summer of 2017.

As a result of the 2017 success, in 2018 the project partners widened the scope to deliver both water safety and anti-social behaviour messaging to a larger group - 150 Year 7 pupils from a local school. Again, 30 minute workshops were delivered by the various agencies, although the significant increase in numbers meant it was not possible to provide a coasteering experience. The workshops were delivered from Tenby Sailing Club and the RNLI Boat Station which helped to focus the minds of those in attendance and allow them to see for themselves the features and dangers being discussed in the workshops.

The 2019 Breakwater Project saw a repeat of the water safety awareness training delivered to approximately 150 year 7 pupils from a local school and utilising the same locations as in 2018. Those who participated in the project in 2018 and 2019 were asked to complete a survey, the results are shown below in Table 3. It is noticeable that approximately 70% of pupils in each year had participated in cliff jumping, with the highest percentage in each year jumping with friends. Following the training there does seem to be an understanding of the hazards involved. Further analysis of the data would enable greater learning regarding the effectiveness of these interventions; changes to the survey would be beneficial if it is to be repeated in the future in order to gain a greater understanding of this target audience and their attitudes and motivations with regard to cliff jumping.

Table 1-1-1

Breakwater Survey Questions	Possible Answers	2018	2019
1. Have you ever been jumping/tombstoning?	Yes No	71% 29%	69% 31%
2. If yes, who with?	with family with friends with both family and friends with an organised company	15% 41% 29% 15%	11% 60% 15% 14%
3. If you have been jumping, have you told your parents or would you tell your parents if you were thinking of jumping?	told their parents didn't tell their parents would tell their parents wouldn't tell their parents	56% 13% 21% 10%	53% 13% 31% 3%
4. Do you feel confident enough to stand up to negative peer pressure?	Yes No	83% 17%	90% 10%
5. After today's workshops, would you have the confidence to make a call to the emergency services?	Yes No	74% 26%	79% 21%
6. From what you have learnt today, what do you think are the biggest dangers around the sea/water?	Swimming on a full stomach Jumping around boats being told off by parents Jumping in, not knowing the depth Not being able to take your phone in the water Not taking spare clothes to keep warm Jumping in, not knowing what is below the surface Thinking you're a better swimmer than you are Having somewhere safe to store your belongings	15% 26% 7% 16% 6% 5% 13% 7% 5%	11% 19% 7% 19% 7% 7% 15% 8% 7%
7. What out of the following list is classed as anti-social behaviour and could get you in trouble with the police?	Hanging around in a large group Swearing at people Throwing stones in the water Vandalism Smoking Playing loud music through wireless speakers Climbing on buildings	10% 18% 7% 22% 13% 10% 20%	5% 23% 3% 24% 8% 16% 21%

In 2020, whilst linking up with the agencies who had previously been involved in the Breakwater Project, the water safety awareness campaign, led by Pembrokeshire Youth Services took a slightly different approach with a more visible presence at Tenby harbour with a trailer promoting the following:

- Respect the Water - a then RNLI campaign
- Dying for a Dip - a Tenby initiative to highlight that “*hazards in the water may be submerged and will be difficult to see*”

This campaign was cut short part way through the season due to a significant increase in numbers of young people in and around the Tenby harbour area jumping regardless of the presence of the various agencies. This caused many challenges for all involved, with a number of issues identified:

- An increase in the number of young people visiting Tenby and jumping. Whilst some of these were locals, many were travelling in from across south & Mid Wales.
- The locals who were jumping appeared to be very knowledgeable about when to jump and when not to jump. This indicated a knowledge of tides, what obstructions were submerged and where they were and the depth of water required to jump into. The locals were witnessed informing the visiting young people about when and where to jump.
- The agencies identified that if they were to stop the activity by enforcing a local bye-law, it had potential to displace the young people to sites that had many more hazards associated with them, hence curtailing the campaign early.
- The issue remained throughout the season and continued to cause issues for the harbour master, who is responsible for the safe passage of boats in and out of Tenby’s active harbour.

During the 2021 season, Pembrokeshire Youth Service led on a project to support the Tenby Water Safety message. Activities included:

- **Education:** A roll out of a digital module on water safety to all Comprehensive Schools/Youth Clubs from Yrs 7-11 paying particular attention to local students.
- **Information Dissemination:** Leaflets, posters and stickers provided to accommodation providers such as holiday parks/hotels/ B&Bs to include in their welcome packages. Visual messages were placed strategically around Tenby. E.g. parking machine notice boards in carparks, bus stops (extra large posters), colour posters for shop doors and banners.
- **Social Media:** @Tenbywater

- **Sharing the messaging:** The project utilised staff from the agencies involved, enabling a modest presence ‘around’ hot spots to have informal discussions with holiday makers around local knowledge and dangers.



## 8. Understanding the generic risks associated with cliff jumping

In considering the generic risks associated with cliff jumping, it is useful to reference where the majority of people experience jumping into water for the first time. The act of jumping into water is encouraged from an early age and often used to gain water confidence when learning to swim. This activity can be observed at any public swimming pool and is an activity that people of all ages take part in, even if it is just used for getting into the swimming pool. Therefore, the swimming pool environment is likely to be the place where most people begin to learn to jump into water and is therefore the reference point for many. Swimming pools are regulated and therefore have many constants:

- the water temperature is maintained between 24°C and 28°C
- the jump/dive is either from the pool side or from a diving board, where the height above the water is noted
- the act of jumping and/diving is limited to an area where the depth of water is deemed appropriate and highlighted.

In comparison, for the majority of outdoor locations where cliff jumping takes place, very rarely will there be constants and so the responsibility lies with the ‘jumper’ and their knowledge / experience to assess the risk. There are three distinct elements to a ‘jump’;

take-off, flight and landing, that need to work together to enable a successful jump. As with any skill, this requires repeated practice which is easily achievable in a swimming pool context but less so in an outdoor context. The decision to jump requires the gathering of suitable information about a variable environment to make an informed choice about whether to jump.

The many variables requiring consideration include:

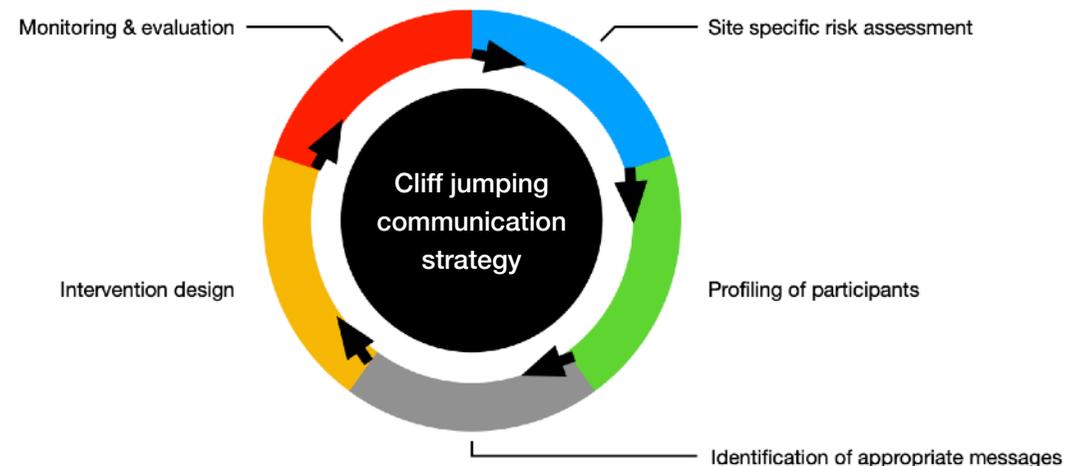
- Water depths and jump heights
- Submerged obstructions
- Water temperature, in particular cold water
- Currents

There may be additional risks at outdoor locations associated with accessing the jump site and exiting the water. Cliff jumping sites are dynamic environments in which weather conditions (both on the day and in preceding days), unstable rock/cliff faces, submerged obstacles moved by water, etc., all contribute to the risk of jumping.

## 9. Developing a cliff jumping communication strategy to reduce fatalities and serious injuries from cliff jumping activity in Wales

This project adopts an applied approach informed by models of behaviour change, combined with practical learning from the case studies which will guide landowners/managers in the development of practical and effective communication strategies which specifically address the current challenges of managing cliff jumping.

The detailed specifics of the interventions for each site will be determined by the site variables as described above but the process of planning and identifying these interventions will be generic, ensuring that



interventions aren't designed around individual incidents.

It is hoped that the adoption of a more considered process to site assessment and intervention design, based around a consistent set of Wales-wide messages will more effectively promote behaviour change with regard to cliff jumping. In addition, the ongoing networking of the agencies involved in this project will allow the sharing of monitoring and evaluation for interventions, driving the adoption of good practice.

## 10.Guidance for the development of a cliff jumping communication strategy

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### 10.1.Generic and site specific assessments of risk

A Jumping into Water Risk Management Checklist has been developed to assist landowners and managers in understanding the hazards at their known jumping sites and the risks associated with jumping (see Appendix 1). The checklist includes:

- physical factors relating to the risk variables such as water depth, water temperature, water quality, jump height and reach, etc.
- known previous incidents and resulting actions
- contributing factors such as ease of access
- site management and community engagement
- risk management and emergency procedures
- participant profiling such as age, ethnicity, group size
- behavioural factors
- current interventions and their effectiveness
- site specific factors e.g. coastal, river, manmade/urban and quarries

The aim of this checklist is for the site manager to look objectively at the jump site with an awareness of the key hazards which are contributing factors to emergency incidents. This information can then be used to inform the design of risk management interventions including direct control methods where appropriate and a communications strategy. Not all factors are significant at all sites so it is important that site specific communications are relevant to the hazards found at the site in question. For example, communications may need to focus on varying water depth due to rainfall or tides at one site, or obstacles beneath the water at another.

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## 10.2. Profiling of participants

For interventions to be effective, there is a need to have a good knowledge and understanding of the participants engaging in cliff jumping and to tailor the interventions to meet their needs. Jumping into water from a height is likely to attract a range of participants with a diversity of beliefs and motivations about appropriate behaviour and understanding of the risks; different sites are likely to have a different profile of participants. Good knowledge of the target audience and what drives them will enable the formulation of more effective strategies to influence behaviour.

The most successful studies which seek to influence peoples' behaviour are those that are careful and precise about linking people's beliefs to the specific behaviour. For communication to have a strong and enduring impact on the jumpers' beliefs, attitudes and behaviour, they need to invest significant mental effort in engaging with and processing the messages; the more he or she thinks about the message, the greater the likelihood that it will influence their behaviour.

Key to designing communications which successfully influence peoples behaviour is to view the experience through their eyes. This guidance outlines an approach which targets the specific motivations of the participants — the first question to address is who is jumping at the site in question?

Information about people participating in cliff jumping at your site can be gathered by;

- Surveys and fieldwork: 30 minute observational surveys at different times of day, days of week and seasons and locations can be very enlightening or you could conduct face-to-face surveys. Information which will enable the development of effective communication interventions will include;
  - age demographic of participants
  - size of group
  - who are they with: friends/family/alone?
  - how far do people travel to visit the site to jump?
  - how do they travel to the site?
  - where/how did they hear about the site?
  - which social media channels do they use?
  - ethnicity

- what safety checks do they do if any?

(Some of this information is included in the Jumping into Water Risk Management Site Checklist [Appendix 1]).

- Analysis of incident statistics and incident reports: An understanding of the chain of events leading to accidents and near-misses is an invaluable source of data to inform more effective hazard communication strategies and is especially useful in challenging some of the assumptions on which visitor management decisions are made. Analyse incident statistics and accident investigation reports to develop an understanding of the causal chain of events leading to accidents.
- Talk to all staff who interact with visitors, including wardens, rangers, local cafe/bar staff (they probably talk to more potential jumpers than anyone else). This is likely to generate useful, extra information but it is liable to bias and assumptions so should be combined with quantitative fieldwork.

It is important to be aware of any pre-existing assumptions when designing communication strategies. Your perception of who is jumping at your site may be challenged by the results of any surveys/fieldwork undertaken, especially given the rapidly changing patterns of behaviour in the outdoors which has been exacerbated by COVID-19. Given the significant number of serious water safety incidents occurring during the summer of 2021, it is important that quantitative information regarding participation is gathered and used to inform communication strategies as quickly as possible.

The concept of the 'visitor journey' has become a commonly understood term for understanding the sequences of events and emotions that occur between a visitor first becoming aware of your site, through their initial planning stages, their arrival in person, and beyond. It recognises that research and planning are integral stages in the process of any travel, and that the sharing of experiences post-visit, can influence the start of the journey for the next visitor. An understanding of who is jumping at your site, how and where they get their information, who they are likely to be influenced by and when and how they can be reached, enables the creation of an informed communications strategy. The aim is to move away from the random scatter-gun of information (in the hope that some who need it, will see it and act on it) towards a well-designed communication strategy, that can reach, target and influence key participants at key points in their journey to the site to encourage them to modify their behaviour

For example, there is anecdotal evidence that a significant proportion of jumpers who get into difficulty are men over the age of 40, under the influence of alcohol. Their understanding and knowledge of the risks associated with water activities will be different from other target groups such as teenagers, as may their visitor journey, beliefs and motivations and skills. If fieldwork determines that this demographic features significantly in the jumping profile at a site then safety messaging should be focused specifically to them through

an analysis of the key touch points in their visitor journey, who they are likely to listen to and how to present the messages so that they target the key beliefs and motivations. One approach could be to link to another already successful safety campaign which has high awareness with this demographic such as ‘You don’t drink and drive.....so don’t drink and jump’ this message could be printed on beer mats (with the proviso that there is confidence that this wouldn’t encourage those who hadn’t thought of jumping to do it).

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### 10.3. Identification of appropriate messages

The appropriateness of message and the language used are key to effective communication with the target audience. It is useful to consider the effect of language and tone of message on participants. In particular, how that communication may sometimes succeed in changing a particular participant’s behavioural intention but that the same communication might also serve more to reinforce how another participant already intends to behave, and for a third participant it might suggest a new behaviour they had never before considered.

The possibility of warnings signs actually encouraging dangerous behaviour in those who had not previously considered it, is highlighted by the proliferation of ‘No Swimming’ signs. In locations where the water looks inviting and the dangers are not apparent, for example, quarry sites, these signs could serve to encourage swimming. This is especially relevant to the entrances to such sites where there is no public access and the water body cannot be seen from the entrance points. In this instance, the appropriate message may well be ‘Keep Out’. If a mandatory warning sign is still required, this could be sited nearer to the water body but out of sight of the entrance and a more appropriate message at this point would be ‘Danger - do not enter the water’. An additional explanation could increase effectiveness such as notification of contaminated water, submerged obstacles or risk of cold water shock.

The following set of principles derived from behavioural change science are useful when designing messages and interventions to effectively influence behaviour.

- i. Keep each message simple and singular (KISS) — give your audience one practical step that is achievable. Pick one behaviour that is a significant cause of the problem and that can yield measurable results
- ii. Always remember the competition — you are trying to deter people from an activity they perceive to be fun, exciting and pleasurable
- iii. Beware of unintended consequences — are there any negative outcomes which may arise if they adopt you preferred behaviour e.g. going to somewhere more dangerous to jump

- iv. No behaviour should be divisible e.g. telling people to jump safely is not a good message because people need to know all the small steps they need to take to ensure they can jump safely
- v. Each behaviour should be end-state.....do they need to do something else before the desired outcome is achieved?

The aim of this guidance is to provide consistency of messaging and to apply it as part of a Wales-wide strategy which evaluates its effectiveness and provides a partnership and structure to learn from previous initiatives and iteratively refine both messages and interventions over time.

In 2021, generic draft messaging for cliff jumping was developed, applying the principles outlined above. There is a temptation in message design to list too many points in too much detail — this messaging focuses on the 5 essential things based on the main hazards outlined in this report, which if acted upon would prevent the majority of incidents. This succinct suite of messages is designed to be used at a national level in order to provide consistency across Wales, this can then be backed up by more nuanced, site specific messaging developed at a local level via the application of this guidance. The generic draft messaging was trialled by some of the member organisations of Water Safety Wales in the summer of 2021.

### *Look 5 times before you leap*

1. How cold? First take a dip to get used to the cold water before you jump
2. Any obstacles? Wearing a mask check the water first for depth, rocks, debris or approaching boats
3. Is it as deep as it looks? Keep checking; water depth changes quickly with tide and rainfall
4. How high, how far? Start low & only jump if you are confident you can make the distance
5. Easy exit? Will currents and conditions allow you to get out?

### *If you doubt you can nail it safely - DON'T JUMP*

The use of this messaging and where and how it is disseminated must be based on the site specific information gained in Steps 1 and 2 of this process. In many instances it may not be appropriate to use this messaging in the immediate locality of the jump site, for fear of encouraging the behaviour. However, it may be used in the wider community or targeted at the demographic known to jump at that site via touch points prior to their arrival on site, for example to local school children as part of water safety education.

The wording of this messaging has been carefully constructed and is based on an understanding of behaviour change. There is a tendency for people to want to take an individual site based approach and to come up with their own messages; an incident in Pembrokeshire in 2021 led to the above messaging being modified by local landowners. The danger in this approach is that the inherent advantage gained through the application of behaviour change principles will be lost, as will any advantages gained through the use of consistent messaging. In its worse case, such approaches could result in other issues such as people finding other more dangerous places to jump.

Table 4 below illustrates how messaging via onsite signage and other local, regional and national interventions can be strategically delivered depending on the site risk assessment. This is a simplified example designed to show how, if there is no public access to a site or if swimming is not safe under any circumstance then it is advisable to make no reference to swimming. At sites where jumping does take place then onsite information can be used to draw attention to the site specific hazards such as obstacles beneath the water or varying water depth, this information can be supported by regional and national campaigns focusing on the 5 hazards ‘Look 5 times...’.

Site characteristics	At site	In surrounding area	Nationally
No public access	KEEP OUT (located at site entrance) DANGER DEEP WATER (located close to jump site)		Cliff jumping is risky business....look 5 times before you leap
Public access but not safe to swim under any circumstances	DO NOT ENTER THE WATER		Cliff jumping is risky business....look 5 times before you leap
	SWIM WALES ACCREDITED SWIMMING SITE 		Cliff jumping is risky business....look 5 times before you leap
Public access, swimming takes place but environmental variables and personal ability means that serious incidents do occur	Hazards beneath the water	Cliff jumping is risky business....look 5 times before you leap!	Cliff jumping is risky business....look 5 times before you leap
	Depth of water constantly changing		

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## 10.4. Design of appropriate interventions

Interventions designed to reduce the number of emergency incidents which arise as a result of cliff jumping are more effective when planned as part of a cliff jumping communication strategy as defined by this study. Interventions include both mechanisms to communicate appropriate messages such as signage and social media as well as direct control mechanisms such as fencing.

### Direct control interventions

#### 1. Re-profiling of rock faces

Rock faces, particularly those found in quarry sites tend to have horizontal 'benches' with inclines leading to lower 'benches'. It is these benches that jumpers use as platforms from which to jump into the water beneath. The re-profiling of these lower benches could potentially remove the platforms from which to jump and therefore negate to reason for entering the quarry site in the first place. That said, it is possible that it may displace the brave amongst the jumping fraternity to consider higher jumps from higher benches. Such action on the part of the quarry owners would incur a significant cost but could significantly reduce and possibly remove jumpers from the site?

#### 2. Positioning of obvious obstacles in landing site

Where jump sites have known obstructions beneath the surface of the water that play a significant part in the injuries and/or fatalities sustained by those who jump, it may be possible to add to the obstructions so that they are very obvious in what was previously the landing site for a jumper. Having been identified as a site with hazards that could cause harm to jumpers, this course of action, could in some circumstances be considered as a control measure to prevent further jumping taking place. This would require a full assessment of the implications and legal advice.

#### 3. Planting/placing of natural barriers — shrubs and hedging

Jumpers commonly find points of weakness in barriers and/or easy access points to jump sites, which may be a low point in a metal fence, a narrow track off a public right of way, etc. The planting and/or placing of natural barriers of shrubs and hedging at known points where access to jump sites is gained is likely to be a suitable deterrent in some cases. Whilst such planting may take time to establish itself, the likelihood of a natural barrier such as this being penetrated is reduced since it becomes more of a challenge, one that the jumper is less prepared for — carrying a wire cutter to go through a stock fence is one thing but a hedge cutters and gloves, etc., is another.

#### **4. Dyeing the water**

A number of quarry sites use the dyeing of water on their sites as a deterrent, by turning inviting vibrant turquoise-blue water into a dark, uninviting black. For the colour to be maintained, regular re-dyeing is required. At the case study site of Burley Hill Quarry, landowners, Tarmac, regularly dye the water, however, jumping, swimming and inflatable dinghy use continues which raises questions as to its effectiveness. There is the possibility that dyeing the water will obscure any potential obstructions that lay beneath the surface of the water so if it is going to be used, there is a need to ensure that there are no known obstructions beneath the surface of the water and that subsequent rockfalls due to unstable rock faces will not lead to obstructions.

### **Communication based interventions**

#### **1. Signage**

- **Development of effective signage**

Signs are a useful and important intervention if used correctly. On-site signage is the last opportunity to inform and influence visitor behaviour with many other opportunities existing earlier in the visitor journey prior to arrival.

Signs need to capture and maintain attention, enabling the processing of the message, involving the factors that produce comprehension (understanding) and memory, thus leading to the final stage — behaviour. Outdoor environments can be cluttered and noisy, and frequently people's attention is divided among numerous stimuli. In this cluttered environment it is unlikely that attention will be paid to more than 1 or 2 signs at each location. There is evidence to suggest that adding more signs leads to 'sign blindness'. In addition, signs tend to lose impact over time. People may have originally paid attention when it was first put up, or on their first few visits, but over time the awareness dissipates. People unconsciously filter out irrelevant information for the information that they think they need in the present. Refreshing the sign can only improve comprehension of the message.

The design/choice of signage to encourage the adoption of a specific behaviour requires a knowledge of behavioural psychology. Traditionally, information boards are produced by visitor managers working with graphic designers. This approach can result in attractive signs which are ineffective in terms of message delivery. Many organisations have access to traditional health and safety signs and this ease of use, combined with an element of habit may dictate the use of these signs over and above a consideration of the appropriateness in terms of likely compliance by visitors. Before opting for an 'off-the-peg' sign design consider whether the available signs deliver the right message to the target audience in an effective manner that is likely to influence behaviour? Warning signs must be notable enabling recall later, so must attract attention. Symbols are widely used; triangles are often utilised for warnings with red,

orange and yellow often used to make a sign noticeable and increase the public perception of danger. It is useful to consider the relevance and understanding of the traditional health and safety language of symbols to the young and 'new' audience. In some situations, the target audience undertaking the problem behaviour, in this case cliff jumping, may not be familiar with hazard warning triangles and alternative symbols may be more effective.

If there is no appropriate sign available then signs may be designed for a particular location/purpose. At the beginning of the design phase, be clear as to the goal of a warning sign in an outdoor situation, is it to;

- alert the visitor to a hazard
- deter an unsafe behaviour
- promote a safe behaviour, or to do a combination of the above?

There is a considerable body of research focussing on the textual and design factors associated with effective warnings. Key findings are:

- The intended location will determine dwell/attention time. Different user groups may have different attention times.
- Signal words appear to increase effectiveness e.g hazard, warning, danger
- The appropriate amount of text on a sign is dictated by the likely dwell time in the proposed location. Research from natural recreation areas suggests that 25-30 seconds is the amount of time visitors will spend reading signs near visitor centres or on bulletin boards
- Threatening or morbid language is less likely to be shared by businesses/tourism organisations because they are concerned that visitors will be scared away
- Text must be easy to comprehend and consideration given to the choice and size of font, with bullets preferred to paragraphs
- Images are most effective when presented with some text.
- The more explicit (clear and detailed) the warning the more likely people will believe that a situation is hazardous.
- Hazard statement information is the second most important aspect of a warning. That information can include multiple components such as the severity of consequences that may result if people do not comply with the warning and specific actions to avoid or mitigate the hazard.

- **Removal of signage at unofficial/unauthorised access points**

The Burley Hill Quarry case study illustrates the difficulty of discouraging access via unofficial routes. In this instance, the perimeter fence was c.2 metres high close to the authorised access point, dropping to c.1 metre further away from access gates. In addition to the perimeter fence, there is a natural hedgerow. There are gaps in the hedgerow in places which provide opportunities for people to climb the fence and gain unofficial/unauthorised access. Prohibiting and warning signs have been placed at these locations which rather than deterring others to use this route, appear to have the effect of drawing attention to possible access points, thereby increasing their use. The Health and Safety legislation requires an occupier to place appropriate safety signage at the authorised access point and further signage where hazards exist on site. The removal of signage at points where others have previously gained unauthorised access, together with additional interventions e.g. planting of natural barriers to fill the gap is likely to have a more positive outcome in deterring unofficial/unauthorised visitors.

- **Removal of ineffective/misleading signage**

There is a myth that every possible risk needs a safety sign but the reality is that using too many signs just guarantees no one will read them (Health and Safety Executive [HSE] 2007). The HSE reiterate this by stating that ‘safety signs are useful; when there’s a significant risk which can’t be avoided or controlled in any other way but that doesn’t mean you should add a sign for every possible risk, however trivial’. A sign needs to be fit for purpose; people need to read it and follow the advice, otherwise it’s not doing its job, and other control measures might be more appropriate. Signage at sites should be regularly reviewed. Signs should be removed/revised if;

- there are multiple signs addressing the same hazard/behaviour
- if there are multiple signs in one location with multiple messages which cannot be reasonably expected to be taken notice of. On site signage should be limited to the most essential messages.
- where signage could lead to unintended behaviours; for example, any signage regarding deep water or swimming should be avoided at the access points for sites which do not have public access because it indicates that there is a water body on the site and can encourage people to trespass in order to explore in the hope of swimming.

## **2. Sanctions**

Warning signs which focus on non-health consequences may be more appropriate to influence at-risk populations. There is research to suggest that ‘sanction’ signage can be more effective than hazard warnings. A study conducted in the US in 2016 identified an audience segmentation of males aged 15-24 who were swimming or wading from the shores of the Potomac River on weekends in late

spring and summer. This study found that people were less likely to enter a dangerous stretch of river when signage was displayed at entrances, toilets, at trailheads and on the shore, which informed visitors that water entry was illegal and could result in a fine of \$200. This was in comparison with traditional 'Danger - no swimming' signs. The study suggests that males aged 15-24 value their hard earned cash more than their health and the threat of a fine would appear to be a sufficient deterrent to them continuing to enter the water. Where the participant profiling suggests a similar demographic accessing jump sites, it may be that such an intervention may be effective.

The issue of enforcement would need to be addressed if the sanction approach is adopted and it may be more suitable for urban locations. There is academic literature which suggests that the display of images of eyes has broad potential as a nudge to complying with requested behaviours. This is not just because eyes grab attention, but because of more fundamental connections between the feeling of being watched and cooperative behaviour. A trial of a sanction intervention, using temporary/seasonal signage which includes images of eyes would be worthwhile in some locations.

### **3. 1-2-1 engagement**

Direct engagement is a resource intensive intervention but it can be particularly effective in influencing behaviour. To be successful careful consideration must be given to the skills of the individuals delivering, the organisation they represent and the messages they deliver.

**In situ engagement with those participating in jumping:** In two of the case studies undertaken (Tenby and Burley Hill Quarry) 1-2-1 engagement with participants has resulted in differing results.

Burley Hill Quarry site has a site manager who visits the site regularly. When he comes across jumpers and swimmers, etc., he takes the time to positively engage with them and in doing so highlights that there is no public access to the site, finds out how they accessed the site and eventually escorts them off the site via the authorised landowner/manager access point. He also asks for a photograph of them, which they are happy to oblige with, which could be used should they be identified as repeat visitors to the site, although on the whole, the site manager believes that his 1-2-1 engagement is effective.

The Tenby Water Safety groups 1-2-1 engagement with participants in 2020, was terminated before the end of the season because the intervention was perceived to be ineffective. There were occasions when the 1-2-1 engagement was taking place with some participants whilst others continued to jump in plain view of those who were there to help prevent such actions. There is a bye-law in Tenby that could be invoked but the concern of the multi agencies involved was that invoking this bye-law would lead to displacing the

participants to sites in the areas where greater hazards exist. A review of the 2020 season led to the alternative approach adopted in 2021 (see Tenby Case Study for further details).

As Burley Hill shows, engaging directly with participants can be an effective intervention, especially if conducted by those with the skills to encourage and offer reason, rather than those who may take a more confrontational approach. Consideration must be given as to whether the individuals concerned and the organisations they represent will be 'trusted' by the target audience.

**With local youngsters via schools:** Engaging with youngsters via the local schools can be an effective intervention as illustrated by the Tenby Breakwater Project of 2017. The combination of enabling Yr 7 pupils from local schools to engage in a coasteering activity delivered by a local adventure activity provider with 30 minute water safety information sessions appeared to be particularly effective. This engaging approach appeared to have a positive impact on those involved and significantly reduced anti-social behaviour issues during the summer of 2017. Such interventions enable those who take part to better understand the environment and the value of being appropriately skilled and equipped.

This approach requires funding and staff time but the social return and potential reduction in the number of incidents requiring an emergency response could be beneficial in some locations. The 'Look 5 times before you leap' messaging would be particularly appropriate for this approach.

The RNLI education team in Wales have developed a Kahoots quiz utilising existing resources and piloted it in 2021 with a number of Secondary schools in Barry (Vale of Glamorgan), targeting year 9 & 10 pupils. The quiz was developed in a way that allowed it to be used:

- a) in a classroom setting and facilitated by a teacher, where the teacher was supported with additional resources e.g. lesson plans, and the quiz used as a knowledge test;
- b) as a self-led learning initiative for the young people to access from home over the holiday period.

#### **4. Establishment of a club**

Many landowners/managers are reluctant to establish formal access to a site for perceived high risk activities such as cliff jumping, open water swimming, SCUBA diving, etc. The default position is to prohibit access and erect 'do not enter the water', 'no access' signage. An alternative approach is to establish a club to manage the activity so that any authorised access to the site for a specific activity is achieved by becoming a member of the club. The club would be required to have a risk management system in place, which would include operating procedures, risk assessments and emergency actions, etc., and where appropriate be affiliated with the

activities National Governing Body (NGB). Such an approach could potentially generate a revenue stream as well as provide reassurance that any access to the site was being managed and controlled. Whilst this approach may not be an option suitable for all sites, it has been used effectively in Dorothea Quarry, Gwynedd, where a club (NW Technical Divers) was established to manage SCUBA diving.

#### **5. Effective communications within all agencies field and operations staff**

It is important to establish clear communications between all of the agencies likely to be involved in any emergency to ensure that there is a knowledge of the geography of the sites, the potential risks and hazards and the requirements to enable a response to an emergency. This requires the land owner/manager to work closely with the emergency services in their locality, ensuring they know the exact location(s), inviting them into/onto the identified site, possibly carrying out an emergency scenario. Landowners/managers should establish clear communications with emergency services and field/operations staff for all sites of serious concern identified through this project.

#### **6. Signpost to sites where water activities are authorised e.g. Swim Wales S.A.F.E. accredited open water swimming sites, RNLI lifeguarded beaches**

In some locations it may be advantageous to signpost people to alternative sites for water activities, where the risks have been assessed and are managed, for example, Swim Wales S.A.F.E. accredited open water swimming sites and RNLI lifeguarded beaches. Whilst this intervention may not deter those intent on cliff jumping, it may encourage those who visit jump sites with the intention of only swimming to go to a safer location.

#### **7. Develop an overall strategy for recreational activity, including open water swimming**

The development of an overall strategy for recreational activity can be useful for sites where there are conflicting uses such as commercial operations and recreational water craft. With the increasing popularity for open water swimming it may be appropriate to work with visitor management teams to develop a strategy for recreational access to the water. The zoning of activities to enable safe swim sites can formalise the activity, thus making it easier to manage and this may decrease un-regulated activity in other areas.

Factors that need to be considered include:

- water quality, depth and temperature
- would it require lifeguarding?

- who would use it — dippers, serious swimmers?
- would it require zoning?
- suitable access and egress points, including emergency exits
- the effects of the weather and currents/flow on the chosen site
- potential conflict with other activities
- capacity of the site

### **Courses, Jumps and Prices.**

There are 4 courses available ranging from 10 feet to 40 feet. Each cliff jumper must start with, and successfully complete the 10 foot course and 1 cliff jump from that height, before moving on to the 20 foot course.

Each cliff jumper must successfully complete the 20 foot course and 1 cliff jump from that height, before moving on to the 30 foot course. Each cliff jumper must successfully complete the 30 foot course and 1 cliff jump from that height, before moving on to the 40 foot course. Additional jumps on any day are priced below per jump. Equipment + Supervision for additional jumps on a subsequent day are priced below.

10ft Course + 1 Jump ... £35 Additional 10ft Jumps on any day ... £10 per jump

Equipment + Supervision for 10ft Jumps on a subsequent day ... £20

20ft Course + 1 Jump ... £45 Additional 20ft Jumps on any day ... £20 per jump

Equipment + Supervision for 20ft Jumps on a subsequent day ... £25

30ft Course + 1 Jump ... £55 Additional 30ft Jumps on any day ... £30 per jump

Equipment + Supervision for 30ft Jumps on a subsequent day ... £30

40ft Course + 1 Jump ... £65 Additional 40ft Jumps on any day ... £40 per jump

Equipment + Supervision for 40ft Jumps on a subsequent day ... £35

### **Certification**

Each cliff jumper who successfully completes the first course will be presented with a signed certification logbook before moving to the next higher level. Each subsequent completed course must be signed off by the Cliff Jump UK instructor before progression to a higher level.

### **Wetsuit, Helmet & Footwear**

Each cliff jumper will be issued with a wetsuit to provide thermal, impact and buoyancy protection to ensure the jumper floats back to the surface without the need to swim, and for the 20-40 feet jumps, a helmet to provide impact protection, for the duration of their courses and additional jumps. Each cliff jumper is required to bring with them a sturdy pair of old trainers, shoes or boots to protect their feet on entry to the water.

### **Cliff Jumping Declaration**

Cliff Jump UK and Dosthill Quarry require a declaration to be made on an individual's ability to undertake cliff jumping, so that it should be quite clear to the cliff jumper that they are declaring that they are not only fit enough to participate in cliff jumping, but also that the participant is medically fit to do so. Any pre-existing medical condition including medication and/or sensitivity to particular drugs should be included on the form.

- demographic who would/could use the site
- the costs from an infrastructure perspective and to the swimmer

Some of the interventions noted in this section may help in answering some, if not all of the factors above and allow the land owner/manager to consider open water swimming as part of an overall recreational strategy.

The involvement of the NGBs for water based activities is important to the development of a recreational strategy as they set the guidelines and parameters of 'good practice'. Cliff jumping is not a regulated activity and does not have a NGB. The unregulated/illicit nature of the activity at certain sites may be a key motivation and driver for jumpers, especially where it involves trespass. If some water activities become authorised and managed this may deter jumpers.

## **6. Engagement with social influencers**

Social media is perceived by landowners/managers to play an important part in influencing the behaviours of others, particularly when it comes to cliff jumping. Posts which identify jump sites and encourage followers to visit them, regardless of whether there is permitted access to the site, are of concern. A review of social media channels (Facebook, Reddit, YouTube and Instagram) and activity related to cliff jumping in Wales and the sites of serious concern was undertaken as part of this study. The results are in Appendix 2. The following search terms (or hashtags for Instagram) were included in the review combined with the site names of the 32 sites of serious concern.

- Jumplifewales (Facebook only)
- Tombstoning
- Cliff jumping
- Cliff diving

The social media review found less content than anticipated with relatively little new content in the past 5 years.

Abereddy had a significant number of posts and attracts attention through the Red Bull Cliff Diving World Series. The official Red Bull Cliff Diving Facebook page has 833k likes and is active every week. They highlight the people who cliff dive, locations and great jumps from their competition. Every search with "cliff diving" brings up a Red Bull result from their competitions.

The other notable Facebook group is JumpLifeWales. Active on Facebook up until 2015, they now appear to offer cliff jump training from Dosthill Quarry National Inland Cliff Jump Centre near Tamworth (<https://dosthillquarry.com/cliff-jumping/>). The courses on offer are as follows;

From this review it appears that social media content focusing on cliff jumping is not a key factor in promotion of the activity. Some online and social media sources include content around 'safe' practice and how to jump safely and for many there is a discussion via the comments, which may or may not be factually correct, around safety issues. There may be potential to work with social influencers to a) promote sites where the risks are managed and b) promoting the 'look 5 times before you leap' messaging. However, it may be more effective to work with the general media to promote the Look 5 times messaging.

The Facebook.com/LADbible/RNLI film had significant engagement (6.2k likes/615 comments and 2k shares). There is no way of knowing the demographic profile of those engaging or whether it reached the target audience. The film is 5 minutes, 11 seconds long and focuses on those involved in a serious incident — a shorter film which focuses on a different motivation may be worth considering in order to reach the target audience.

## **7. Engaging the media with consistent, nationally agreed messaging**

Engaging with national, regional and local media to ensure balanced and consistent reporting on cliff jumping incidents would be a beneficial intervention with the intention of improving understanding of this activity. Consideration should be given to the development of a standard press response template which is consistent across Wales and used by all stakeholders when asked for comment around individual incidents. The template would ensure that local details could be added but the overall message and approach is consistent and joined up.

## **8. Working with local businesses**

Working with partners such as local businesses to disseminate messages is a useful way to reach potential jumpers. The Tenby Water Safety campaign of 2021 worked with local businesses in Tenby by creating leaflets, posters and stickers and providing them to accommodation providers such as holiday parks/hotels/B&Bs to be included in their welcome packages. Visual messages have also been placed strategically around Tenby. E.g. parking machine notice boards in carparks, bus stops (extra large posters), colour posters for shop doors and banners. Examples of these can be found in the Tenby Case Study above.

Pubs, restaurants, shops and off-licences are useful touch points, especially for those who are likely to jump under the influence of alcohol. Messaging specifically geared for this audience could be disseminated via a variety of means such as on beer mats and menus as well as ensuring posters are placed in shops and off-licenses where alcohol is available.

### **9. Engagement with public transport providers**

Where the profiling of possible jumpers suggests that they are likely to arrive by public transport, messages may be targeted via public transport operators such as Transport for Wales and Cardiff Bus , etc., via posters at identified touch points such as train stations, trains, bus stops and buses.

Potential touch points for those driving to a site include local radio, petrol stations, motorway services and car parks.

### **10. Database of offenders, especially where illegal access has been gained to jump sites**

Details of car registration numbers known to visit the site regularly have been used at Burley Hill Quarry to enable a subsequent visit by the police in their home area in the week following their visit.

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## 11. Monitoring and evaluation

Current interventions in relation to cliff jumping tend to be ad hoc and in response to local issues. Good practice would suggest a more strategic, joined up approach to be most effective, tailoring interventions to meet the needs of the target audience. The continued monitoring and evaluation of interventions implemented across Wales will enable the ongoing development of evidence-based good practice. By working together, stakeholders can develop and implement a hierarchical message structure which is generic at the national scale (Look 5 times before you leap) and increasingly nuanced and targeted at a regional and local level.

The map and register of jump sites developed as part of this study should be updated at least every five years.

Where new sites are identified, all interests (landowners, land managers and emergency services) should work together to develop a communication strategy using the guidance outlined in this report.

Local communication initiatives should be properly and objectively evaluated and the findings shared and discussed by the group of networking organisations established through this study. An assessment and understanding of why specific interventions didn't work in particular circumstances is as important as knowing why other interventions were effective.

## 7. Summary and recommendations

- A Wales-wide strategic approach to communications as outlined within this report would target messaging with the aim of influencing behaviour by alerting the visitor to a hazard; deterring unsafe behaviours and promoting safe behaviours; or a combination of all three.
- Currently information gathered about serious cliff jumping incidents is variable in terms of reliability and content. Where appropriate and when injured parties/families are agreeable it may be informative to follow-up incidents with a more detailed investigation to include the decisions, motivations and understanding of risks of the injured person.
- A national reporting system would enable detailed information to be gathered and used to inform the design of future interventions. Currently this information is difficult to obtain immediately following an incident, with the detail only coming to light for example, as a result of a Coroner's inquest months / years later. The availability of such information would not only maintain up-to-date data for Wales but would also inform the design of future interventions more quickly, therefore having the potential to reduce the likelihood of the same incident happening sooner.
- Pilot and evaluate the Risk Management Checklist developed as part of this study. This checklist is designed to assist the land owner/manager in identifying the issues of concern and the contributory factors associated with the safety of participants jumping into water at that location. The information gathered will be based on observations and facts, which together will inform the most appropriate interventions to consider for the specific site. This is not a risk assessment but is a tool to assist with risk management. The evidence based process is designed to provide the landowner/manager with site specific information which will enable them to more effectively manage behaviour at sites of concern.
- Develop and pilot an online national quiz aimed at Years 9 & 10 pupils, similar to the pro-active approach of the RNLI pilot Kahoots quiz, with questions and film footage featuring various coastal and inland environments.
- By working together to promote consistent messaging concerning cliff jumping, the reach of the resultant communications will be far greater than the current more ad hoc and locally reactive approach.
- Evaluation and sharing of the results of locally implemented interventions across all stakeholders on a Wales-wide basis will assist in the development of good practice.

- Establishing a standardised press response template which is consistent across Wales and used by all stakeholders when asked for comment around individual incidents by the media. The template would ensure that local details could be added but the overall message and approach is consistent and joined up.
- Update the map and register of jump sites developed as part of this study at least every five years.
- Develop a shorter version of the [Facebook.com/LADbible/RNLI](https://www.facebook.com/LADbible/RNLI) film which focuses on different motivations in order to reach the target audience.

# Appendix 1 : Jumping into Water Risk Management Checklist

(for use by land owners/managers when assessing known 'jump' sites on their land)

The aim of this checklist is to help the land owner/manager identify the areas of concern and the contributory factors associated with the safety of participants jumping into water at a location where jumping is known to take place. The information gathered will be based on observations and facts, which together will inform the most appropriate interventions to consider for the specific site. This is not a risk assessment but is a tool to assist with risk management. The evidence based process is designed to provide the landowner/manager with site specific information which will enable them to more effectively management behaviour at sites of concern.

# Jumping into water risk management site checklist

Part 1: Generic Factors				
	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions give % breakdown if possible
Access to the site	Does public access (a public right of way) exist to the site?			
	If so, does this access extend through the site or does it go around the periphery?			
	Is access to the site prohibited?			
	If so, do people regularly gain illegal entry to the site for the purpose of accessing the water?			
	If so, do you know how access is gained?			

## Part 1: Generic Factors

	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions give % breakdown if possible
Visitors	What is the typical age demographic of people who visit the site to jump into the water? (Tick all that apply)	10-18		
		18-30		
		30-50		
		50		
	How far do people travel to visit the site to jump?	Local - 10 mile radius		
		Regional - 20 mile radius		
		Tourists - 10+ miles		

## Part 1: Generic Factors

	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions give % breakdown if possible
	How do they travel to the site?	Public Transport		
		Car		
		Foot/Bike		
	What is the ethnic profile of your visitors?	White		
		Mixed or multiple ethnic groups		
		Asian or Asian British		
		Black or Black British		
		Arab		
		Other		

## Part 1: Generic Factors

	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions give % breakdown if possible
Alcohol/drug influenced behaviour	Are you aware of any behaviour relating to jumping that is or has been influenced by alcohol and/or drugs?			
Previous incidents	Have there been any serious (non-fatal) incidents in the last 5 years?			
	If so, what are the details of the incident, including any investigations, outcomes and particularly were any interventions put in place as a result?			
	Have there been any fatal incidents in the last 5 years?			
	Are Coroner's Reports used to inform risk management			
	Who records, reports and reviews the incidents? Is a trend analysis produced?			

## Part 1: Generic Factors

	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions give % breakdown if possible
Unstable rock	Have there been any obvious recent rockfalls (past 12 months)?			
	Are there any identifiable locations where rockfall is possible? If so, where are these in relation to visitor access throughout the site - access points, jump sites, water entry and exit points?			
Water temperature	Have there been incidents at the site where cold water shock has been a contributing factor?			
Water depth	Is the water depth subject to increased precipitation or tidal range?			
	Is it possible to record the water depth range?			
Water quality	Is it a 'fresh' or 'sea' water location?			
	Is the water quality tested? If so, do you act on this information with regards to water recreation activities?			

## Part 1: Generic Factors

	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions give % breakdown if possible
Submerged obstacles	Are there any submerged obstacles located beneath the jump site? If so, are they obvious to the jumper?			
	Do water levels either obscure or heighten visibility of the obstacles?			
Other users	Besides 'jumpers', who uses the site - swimmers, kayakers, SUPers etc.?			
	Do they have a right to be there? If not, what measures are taken with these groups?			
Water exit points	Do you know where the exit points are in relation to the jump take off and landing sites?			
	Does the exit point(s) present any specific challenges i.e. barnacle coverage, challenging climb back to take off point, rockfalls etc.			

## Part 1: Generic Factors

	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions give % breakdown if possible
Jump height and reach	What is the height between take off point and the surface of the water?			
	What is the distance needed to jump outwards away from the take off point to avoid any hazards on entry?			
Community engagement	Do you engage with the local community to highlight the issues relating to jumping into water - schools, youth groups, parish council, other community groups, police etc.? If so, how?			
On-site presence	Does the site have a presence? i.e. employees/volunteers who visit the site?			
	If so, how often do they visit the site and for what reason?			

## Part 1: Generic Factors

	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions give % breakdown if possible
Mobile reception	Is there mobile phone emergency call coverage at the jump site? If so, how extensive is it? If not, where is the nearest location for this?			
Location information	Is there any information at the jump site that denotes its actual location - grid reference, lat & long etc?			
Signage	Is there signage to influence behaviour with regard to cliff jumping?			
	Where is the signage located?			
	Is the potential for influencing behaviour change considered in signage content and design?			
	Is signage reviewed regularly?			

## Part 1: Generic Factors

	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions give % breakdown if possible
Risk management	Has a risk assessment been carried out in relation to jumping activity at this site?			
	If so, what controls (so far as reasonably practicable) are in place?			
	Are there currently any additional interventions in place? If so, what and how effective are they?			
Rescue equipment	Are there any rescue devices on site, close to hand? If so, what and where are they located?			

## Part 1: Generic Factors

	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions give % breakdown if possible
Emergency service engagement	Do the emergency services (Police, Ambulance, Fire & Rescue, Mountain Rescue, Coastguard, RNLI) have knowledge of the site?			
	If so, do they know who the best contact is, in the event of an emergency?			
	How would they gain access in the event of the need to undertake a rescue etc.?			
	Is there an emergency action plan in place and if so, has it been tested for its effectiveness? Did this involve the emergency services?			
Current interventions	What interventions are currently in place to manage cliff jumping?			
	How effective are they?			

**Part 2 - Site Specific Factors - COASTAL**

	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions tick the option which the majority would fall into
<b>Tidal Influence</b>	What is the tidal range at the jump site?			
	At which point in the tidal range is the water depth sufficient for jumping. For example, 2 hours either side of high tide (calculate for worst case i.e for neap tide)			
	Do currents / tidal flows / swell make it difficult to exit the water?			

## Part 2 - Site Specific Factors - RIVER

	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions tick the option which the majority would fall into
<b>River flow Influence</b>	Does precipitation affect the risk of jumping at this site, either due to high flows or low flows?			
	Are interventions required at high or low flows?			

## Part 2 - Site Specific Factors - MANMADE / URBAN

	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions tick the option which the majority would fall into
<b>Water Quality</b>	Is poor water quality a risk factor for water recreation activities?			
	If so, are interventions in place when water quality is poor.			
<b>Close to urbanisation</b>	Is the site in close proximity to restaurants/bars etc. where alcohol may influence behaviour in relation to jumping into the water?			
	If so, has there been any engagement with restaurant / bar / shop owners to assist in managing the issues of jumping?			
	If so, how engaging have they been?			
	How effective have the interventions been?			

## Part 2 - Site Specific Factors - QUARRY

	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions tick the option which the majority would fall into
<b>Water Levels &amp; Quality</b>	Does the depth of water vary with weather conditions?			
	If so, does the varying depth affect the risk of jumping?			
	Has the water quality been tested with regard to water recreation activities?			
	Are there interventions in place relating to water depth or quality?			
<b>Dyeing the Water</b>	Is the water dyed?			
	If so, how frequently is it done?			
	When was it last done?			
	Is its effectiveness reviewed?			
	Does the dyed water obscure any known submerged obstacles?			
	If it does, are there any additional interventions in place to address this?			
	If so, what are they?			

## Part 2 - Site Specific Factors - QUARRY

	What to consider	Complete tick box column and add details here if relevant	✓	For multi choice questions tick the option which the majority would fall into
<b>Site Security</b>	Does the site have a security guard/ manager?			
	If so, how often do they visit and for why? If not, why not?			
	Are they briefed in how to deal with people visiting the site?			
<b>Site Boundary</b>	Is the site contained within a boundary?			
	If so, is it a natural boundary or an erected fence?			
	How high is the boundary?			
	How effective is it at keeping out unwanted visitors?			
	In what state of repair is the boundary?			
	How often is the boundary checked & by whom?			
	Who is responsible for maintaining the boundary?			

## **Appendix 2 - Social Media Review**

Every combination of SEARCH TERMS + LOCATIONS (listed in the tables below) were used to search social media sites Reddit, Facebook, Youtube and Instagram. The most popular/relevant results have been listed in the following sheets, with any 5+ years old or low quality posts being ignored. For Instagram 2 relevant hashtags were used. These hashtags were then searched for any cliff jumping posts with a location tag (or hashtag) of the LOCATIONS and entered into the table. The posts were then briefly described with a review of the engagement, the account that posted the content and the perceived target audience. Any empty cells or cells with "No Result" meant that there are no results relevant to the search.

<u>SEARCH TERMS</u>
Jumplifewales (Facebook only)
Tombstoning
Cliff jumping
Cliff diving

<u>LOCATIONS</u>	
Coastal	Inland
Between Limeslade and Langland Bay (Mumbles)	Pont y Pair Bridge
Cardiff Bay	Waterfalls (Neath Valley)
Porthcawl Harbour wall	The Island (River Usk)
Blackweir (Cardiff)	Quarries
Blue Lagoon (Abereddy)	Vivan Quarry
St Nons (St Davids)	Glynrhonwy Quarry
Pointz Castle	Burley Hill Quarry
Haroldston Bridge	Pant Quarry (North Wales)
Tenby Harbour	Trimm Rock Quarry
Ceibwr Bay	Ifton Quarry
Black Rock (West of Lydstep)	Dorothea Quarry
Milford Dock/Harbour	
Hobb's Point	
Stackpole Quay	
Porth Dafach (Anglesey)	
Porth Tre Castell (Anglesey)	
The Creek (Amlwch)	
Pigeons Cove, Great Orme (Llandudno)	

<b>Reddit</b>					
<b>Tombstoning + location</b>	<b>Link</b>	<b>Description</b>	<b>Perceived target audience</b>	<b>OP description</b>	<b>Likes/Comments</b>
Coastal					
Between Limeslade and Langland Bay (Mumbles)	No Result				
Cardiff Bay	No Result				
Porthcawl Harbour wall	No Result				
Blackweir (Cardiff)	No Result				
Blue Lagoon (Abereiddy)	No Result				
St Nons (St Davids)	No Result				
Pointz Castle	No Result				
Haroldston Bridge	No Result				
Tenby Harbour	No Result				
Ceibwr Bay	No Result				
Black Rock (West of Lydstep)	No Result				
Milford Docks/Harbour	<a href="https://www.reddit.com/r/WalesNews/comments/cieoxd/the_port_of_milford_haven_warns_against/">https://www.reddit.com/r/WalesNews/comments/cieoxd/the_port_of_milford_haven_warns_against/</a>	Posted on r/WalesNews so the post is aimed at the public and not specifically related to cliff jumping. The post is a link to a news article from the Western Telegraph mentioning how there are bye-laws against tombstoning here.	N/A	The poster is a news bot, so posts news articles on a few subreddits and nothing else.	There are no upvotes or comments
Hobb's Point	No Result				
Stackpole Quay	No Result				
Porth Dafach (Anglesey)	No Result				
Porth Trecastell (Anglesey)	No Result				
The Creek (Amlwch)	No Result				
Pigeons Cove, Great Orme (Llandudno)	No Result				
Inland					
Pont y Pair Bridge	No Result				
Waterfalls (Neath Valley)	No Result				
The Island (River Usk)	No Result				
Quarries					
Vivan Quarry	No Result				
Glynrhonwy Quarry	No Result				
Burley Hill Quarry	No Result				
Pant Quarry (North Wales)	No Result				
Trimm Rock Quarry	No Result				
Ifton Quarry	No Result				
Dorothea Quarry	No Result				

Reddit					
cliff jumping + location	Link	Description	Perceived target audience	OP description	Likes/Comments
Coastal					
Between Limeslade and Langland Bay (Mumbles)	No results				
Cardiff Bay					
Porthcawl Harbour wall					
Blackweir (Cardiff)					
Blue Lagoon (Abereddy)	<a href="https://www.reddit.com/r/Wales/comments/m1afej/throwback_to_cliff_jumping_and_swimming_in_the/">https://www.reddit.com/r/Wales/comments/m1afej/throwback_to_cliff_jumping_and_swimming_in_the/</a>	A post of a picture in the r/Wales subreddit of a man cliff jumping at the blue lagoon. He also commented promoting the location. There are no comments/ concerns on safety anywhere.	The post was in the r/Wales subreddit so the target audience would be other Welsh people. The OP mentions hikes in their comment too so I would assume its aimed at other people who enjoy the outside	The poster has posted loads of video links to their youtube where they go on hikes and find interesting locations. They also seem to want to promote the UK's outdoors. Most posts are getting around 10 upvotes and a couple of comments.	242 upvotes and a single comment mentioning how good the location is. Possibly upvoted mainly because of the decent photo and not due to interest in cliff jumping.
	<a href="https://www.reddit.com/r/TravelVlog/comments/ikf0er/the_best_cliff_jumping_spot_in_the_uk_blue_lagoon/">https://www.reddit.com/r/TravelVlog/comments/ikf0er/the_best_cliff_jumping_spot_in_the_uk_blue_lagoon/</a>	A link to a video by the same OP as the above post. The video is of them hiking and cliff jumping in the Blue Lagoon. Its a 9 minute video showing roughly how to get to the location, them jumping and hiking around the area. The only mention of safety is to check the depth before jumping.	It was posted in r/travelvlog so its aimed at people who want to watch videos of others enjoyoing their travels. The main focus of the video is the experience of a mid 20s male, so potentially its aimed at that demographic?	Same as above	3 likes and 1 comment, so a generally low engagment. It was crossposted in other similar subreddits too with minimal engagement
	<a href="https://www.reddit.com/r/Wales/comments/pa3nqi/cliff_jumping_at_the_beautiful_blue_lagoon_in/">https://www.reddit.com/r/Wales/comments/pa3nqi/cliff_jumping_at_the_beautiful_blue_lagoon_in/</a>	Another post on r/wales to a 4 minute video of a young man cliff jumping and kayaking around Blue Lagoon. The video features multiple people cliff jumping but no information on how to get there or how to cliff jump safely.	The post was in the r/Wales subreddit so the target audience would be other Welsh people. The OP is a young man and so this could draw in other men in their early 20s	The OP posts a lot of hiking and swimming abroad. They post their content on any subreddit vaguely related in the hopes of increasing engagement.	13 upvotes and a couple of comments that complain about the popularity of the spot and how it used to be less well known.
St Nons (St Davids)					
Pointz Castle					
Haroldston Bridge					
Tenby Harbour					
Ceibwr Bay					
Black Rock (West of Lydstep)	No results, however there also seems to be a cliff jumping spot in Michigan (US) with the same name.				
Milford Docks/Harbour					
Hobb's Point					
Stackpole Quay					
Porth Dafach (Anglesey)					
Porth Tre Castell (Anglesey)					
The Creek (Amlwch)					
Pigeons Cove, Great Orme (Llandudno)					
Inland					
Pont y Pair Bridge					
Waterfalls (Neath Valley)					
The Island (River Usk)					
Quarries					
Vivan Quarry					
Glynrhonwy Quarry					
Burley Hill Quarry					
Pant Quarry (North Wales)					
Trimm Rock Quarry					
Ifton Quarry					
Dorothea Quarry					
	<a href="https://www.reddit.com/r/cliffjumping/">https://www.reddit.com/r/cliffjumping/</a>	This is the link to a dedicated cliff jumping subreddit. The subreddit rules state that you can't share locations, so the chances of someone being able to find a spot to jump is low. There is no safety information, mainly videos of people jumping. It has roughly 3500 members	The videos mainly show teenage/early 20s men jumping, so I would assume that the subreddit is mainly used by a similar audience.	N/A	The subreddit doesn't look particularly active. There seems to be multiple days between people posting videos, with each video getting between 30 and 60 upvotes and around 4 comments.

Reddit					
Cliff diving + location	Link	Description	Perceived target audience	OP description	Likes/Comments
Coastal					
Between Limeslade and Langland Bay (Mumbles)	No result				
Cardiff Bay	No result				
Porthcawl Harbour wall	No result				
Blackweir (Cardiff)	No result				
Blue Lagoon (Abereddy)	<a href="https://www.reddit.com/r/AdrenalinePorn/comments/pa5o5t/cliff_diving_at_the_beautiful_blue_lagoon_in/">https://www.reddit.com/r/AdrenalinePorn/comments/pa5o5t/cliff_diving_at_the_beautiful_blue_lagoon_in/</a>	Post of a picture of a man backflipping at the Blue Lagoon.	Posted in the r/Adrenaline porn subreddit so I assume its aimed at other cliff jumpers/risk seekers. OP also posted in numerous other subreddits to do with Wales, nature, hiking and adventuring, but this post got the most response. It seems OP wants engagement more than to specifically target cliff jumpers	This is the same OP that posted the 4 minute video of cliff jumping on the "Reddit - Cliff jumping" sheet.	265 upvotes and has 15 comments. Engagement seems mainly to do with giving the OP a hard time for sharing the location.
St Nons (St Davids)	No result				
Pointz Castle	No result				
Haroldston Bridge	No result				
Tenby Harbour	No result				
Ceibwr Bay	No result				
Black Rock (West of Lydstep)	No result				
Milford Docks/Harbour	No result				
Hobb's Point	No result				
Stackpole Quay	No result				
Porth Dafach (Anglesey)	No result				
Porth Trecastell (Anglesey)	No result				
The Creek (Amlwch)	No result				
Pigeons Cove, Great Orme (Llandudno)	No result				
Inland					
Pont y Pair Bridge	No result				
Waterfalls (Neath Valley)	No result				
The Island (River Usk)	No result				
Quarries					
Vivan Quarry	No result				
Glynrhonwy Quarry	No result				
Burley Hill Quarry	No result				
Pant Quarry (North Wales)	No result				
Trimm Rock Quarry	No result				
Ifton Quarry	No result				
Dorothea Quarry	No result				
	<a href="https://www.reddit.com/r/cliffdiving/">https://www.reddit.com/r/cliffdiving/</a>	This is the cliff diving subreddit. It has just shy of 300 members. There are no posts relating to Wales. There is no safety information and the tagline for the subreddit is "Just Shut Up and JUMP" suggesting that safety is of minimal concern.	The target audience seems to be for people searching for spots to jump in the US with very minimal UK participation.	N/A	There hasn't been any engagement in 2 years

Facebook					
Jumplifewales + location	Link	Description	Perceived target audience	OP description	Likes/Comments
Coastal					
Between Limeslade and Langland Bay (Mumbles)					
Cardiff Bay					
Porthcawl Harbour wall					
Blackweir (Cardiff)					
Blue Lagoon (Abereiddy)	<a href="https://www.facebook.com/JumpLifeWales/photos/a.1330658166955167/1573095006044814/">https://www.facebook.com/JumpLifeWales/photos/a.1330658166955167/1573095006044814/</a> <a href="https://www.facebook.com/JumpLifeWales/videos/1575065539181094">https://www.facebook.com/JumpLifeWales/videos/1575065539181094</a>	Picture of 3 men (mid 20s) in A&E, with one man having a cut on his shin. Also mentions Lady's fall in Neath. Even with an injury there is no mention of safely jumping, only hyping up the activity. It also promotes a video edit coming soon, which is the second link in the right hand box. There is no talking in the video, it's an edit of clips with some music over the top.	There is an emphasis on how "sick" of an adventure it was, so the target audience is probably other men who like to cliff jump or adrenaline seekers.	The Jump-life page	60 likes and 16 comments for the picture. The comments are split between people thinking they are wasting the NHS' time or praising the men on how much of a great weekend it seemed. The video has 57 likes and 10 comments, which all say the same thing. The video also has 2k views, which is quite a large outreach for a page with half that many likes.
St Nons (St Davids)					
Pointz Castle					
Haroldston Bridge					
Tenby Harbour					
Ceibwr Bay					
Black Rock (West of Lydstep)					
Milford Docks/Harbour					
Hobb's Point					
Stackpole Quay					
Porth Dafach (Anglesey)					
Porth Tre Castell (Anglesey)					
The Creek (Amlwch)					
Pigeons Cove, Great Orme (Llandudno)	<a href="https://www.facebook.com/JumpLifeWales/videos/1505933596094289">https://www.facebook.com/JumpLifeWales/videos/1505933596094289</a>	A video of the "jump life crew" doing backflips into the sea and climbing up the cliffs. There are no directions on how to get to the location but there are several hashtags that give you the location pretty accurately. The text for the video mentions the beauty of the area and nothing else.	This seems to be aimed at the general audience for the page. The video seems like a montage of a good weekend rather than trying to promote anything.	The Jump-life page	The video has 43 likes, 7 comments and 936 views. The comments seem to praise the jumpers for making a good video and having a good time.
Inland					
Pont y Pair Bridge	<a href="https://www.facebook.com/JumpLifeWales/posts/1509204885767160">https://www.facebook.com/JumpLifeWales/posts/1509204885767160</a>	The Jump-life page sharing a post from the North Wales police asking people not jump off the bridge. The post's intent is to warn people that the police are watching the location and to not get caught	Other jumpers who use the location.	The Jump-life page	The post has 9 likes and 5 comments. The comments discuss how to jump from the bridge and get away with it.
Waterfalls (Neath Valley)	See the post on Blue Lagoon as the video also included footage from this location				
The Island (River Usk)					
Quarries					
Vivan Quarry	<a href="https://www.facebook.com/JumpLifeWales/photos/a.1304768406210810/1903022963052015">https://www.facebook.com/JumpLifeWales/photos/a.1304768406210810/1903022963052015</a>	A picture of Nikis leap, promoting a video (that I can't find on their page) of someone being the first to flip off the cliff.	People who are interested in cliff jumping and wanting to see someone flip off the cliff. Most likely men in their early/mid 20s as this is mainly the demographic that seem to engage with Jump-life	The Jump-life page	98 likes, 53 comments and 8 shares. The comments are mainly people sharing the exact location or mentioning how they have also jumped here.
	<a href="https://www.facebook.com/JumpLifeWales/videos/1469931019694547">https://www.facebook.com/JumpLifeWales/videos/1469931019694547</a>	An edit showing clips of the jump-life team walking to the quarry, measuring the height and then jumping in.	People who are interested in cliff jumping and wanting to see people cliff jump. Most likely men in their early/mid 20s as this is mainly the demographic that seem to engage with Jump-life	The Jump-life page	94 likes, 49 comments and 30 shares. The comments are mainly people sharing the exact location or mentioning how they have also jumped here.
	<a href="https://www.facebook.com/JumpLifeWales/photos/a.1468675603153422/1468675609820088/">https://www.facebook.com/JumpLifeWales/photos/a.1468675603153422/1468675609820088/</a>	The same as the first link, this post is essentially identical but with a different picture			29 likes, 15 comments and 1 share. Comments ask for a location and height for the cliff.
Glynrhonwy Quarry					
Burley Hill Quarry					
Pant Quarry (North Wales)					
Trimm Rock Quarry					
lfton Quarry					
Dorothea Quarry	<a href="https://www.facebook.com/JumpLifeWales/videos/1723943734293273">https://www.facebook.com/JumpLifeWales/videos/1723943734293273</a>	A quick clip of a man in his mid 20s doing a back flip off the 60ft cliff.	Aimed at other cliff jumpers who want to push themselves or watch others doing the same.	The Jump-life page	57 likes and 11 comments. Comments discuss how brave the jumper must be and how cool the clip is.
	<a href="https://www.facebook.com/JumpLifeWales/videos/1631480210206293">https://www.facebook.com/JumpLifeWales/videos/1631480210206293</a>	A video of the same man as above, but a year earlier failing at this jump. The man gets winded and there's a stressed ending of the camera man beginning to run to the water.	Highlights the danger of cliff jumping but doesn't tell people how to jump safely and prevent the injury shown. The target audience is probably other jumpers and not the general public.	The Jump-life page	37 likes and 3 comments checking if the man is okay
	<a href="https://www.facebook.com/JumpLifeWales">https://www.facebook.com/JumpLifeWales</a>	This is a page all about showcasing different cliff jumping videos. There is a disclaimer in the description of the page about how they are trained professionals, with a link to river and sea sense ( <a href="https://www.riverandseasense.com/">https://www.riverandseasense.com/</a> ). There hasn't been an upload since July 2020, and the post before that was in 2019, so the page isn't particularly active anymore. Most of the links here are from 2017-2018	Seems to be aimed at MOP who want to cliff jump or are interested. Seems to mainly showcase cool videos rather than how to jump safely or how to get to locations.		Most videos seem to get between 20-100 likes and around 10 comments.

Facebook					
tombstoning + location	Link	Description	Perceived target audience	OP description	Likes/Comments
Coastal					
Between Limeslade and Langland Bay (Mumbles)	<a href="https://www.facebook.com/GwentandMore/posts/3866485596769173">https://www.facebook.com/GwentandMore/posts/3866485596769173</a>	A link to a news article about a cliff jumping accident. The post is a condensed version of the text in the link.	People who may cliff jump but hopefully won't know that they've seen the article	a local news page for Gwent. Posts regularly	27 likes and 1 comment
Cardiff Bay	<a href="https://www.facebook.com/photo/?fbid=1696941917009550&amp;set=basw.AboUp5RVfAUy_uQ07LnGTal6zTmryGL_buBSC-GTQPap6kw0Swaya0sto4x1FCcv1q1oUalDS7ENQsJX_0hvCmObi7P1CoFcCaYGfFeACqTfID2CdC4QZXWByATxt98JkSHizcAlpPwLnzVWVntvd5q7xL_PienFqodB52Bmw-VGMw&amp;opaqueCursor=AboDGIBoasRR7m2R327ZBUeoLEtb4LJ2so9PhA7me4_SDWnVjYEuCS4jSieysVNr6TMaF7MRJe4lvQlnh6ZsNQpWp1OqD4SLTPzTvBqAX5Q5dEgSyunpxyagyvqhNsHXRFj8dcB1TWQ2I924AA73R48878WCEvhM4_W6NeaGSz9817UBrp5aDluOdSmnonh0hM9v7YihvBg_z8elWki3IPzmtf3DMK8wPTd0a476dRiHIMJeDJZvUn1aRWol1zG6wshyIMNG0wzW0eNS5Wgk1bwbz-W6v_ofZFITquCRPX0WALE46FysXJfsRkjMoVKtqekGjceohCjvKNT_9F0z0G5aEDyWA0IDPpyFL4ovuYF1k-M3a9S4LLwvZ0NTOxbrZvFLJDX1Ojhcl7K4O9_o_tBjLAzYSQRGTEmH-fH9TI70_07N1da0ZvVfjq00iLUg76Bfxr85dRVwXw7nWTFPUNybkqquBQPHEJzE2E3zeeFGsERuRTGk9lktDZ0MRiVp226nJcxG7G827tupHAKzphISTxEfdMw6UoalEnn8iP31G3scn5siBC95rMLxEgKtNamOyjfgQf3IKuYoQl2ofeyYvD2VD9szNfFKq3cqNTUSGoGC_x5_aeFLRJZgkpa6Hg1x0rFkkXA3zNfhX8s7pBRbmWiBuOwhzh0hAxdxKRbPRnvR2PQJ2AI0FaVs2P3qUgfp9-Pwz3uvm-ux3YQhfdcf4Kt6nxLkdXGhHkrbiA7AFncf3VmbscdXeF7Ob50ljgovuGx63VMgBwcfN20rCrQFiyL2OBQIMoAXpbnzrIUaTYkiAQZfMopmN-xbRuPoSwsGIHF0BVwuxFR8bi70kov1D72NwflmrtvAEk4PNiUvanuO3obvCeJWRxn9_WwiFmM2GlbTpXr-DBmtd-g410kPpEKZSI8B68UAX-w79XT36a1gw2nhudF5_1IQ7s">https://www.facebook.com/photo/?fbid=1696941917009550&amp;set=basw.AboUp5RVfAUy_uQ07LnGTal6zTmryGL_buBSC-GTQPap6kw0Swaya0sto4x1FCcv1q1oUalDS7ENQsJX_0hvCmObi7P1CoFcCaYGfFeACqTfID2CdC4QZXWByATxt98JkSHizcAlpPwLnzVWVntvd5q7xL_PienFqodB52Bmw-VGMw&amp;opaqueCursor=AboDGIBoasRR7m2R327ZBUeoLEtb4LJ2so9PhA7me4_SDWnVjYEuCS4jSieysVNr6TMaF7MRJe4lvQlnh6ZsNQpWp1OqD4SLTPzTvBqAX5Q5dEgSyunpxyagyvqhNsHXRFj8dcB1TWQ2I924AA73R48878WCEvhM4_W6NeaGSz9817UBrp5aDluOdSmnonh0hM9v7YihvBg_z8elWki3IPzmtf3DMK8wPTd0a476dRiHIMJeDJZvUn1aRWol1zG6wshyIMNG0wzW0eNS5Wgk1bwbz-W6v_ofZFITquCRPX0WALE46FysXJfsRkjMoVKtqekGjceohCjvKNT_9F0z0G5aEDyWA0IDPpyFL4ovuYF1k-M3a9S4LLwvZ0NTOxbrZvFLJDX1Ojhcl7K4O9_o_tBjLAzYSQRGTEmH-fH9TI70_07N1da0ZvVfjq00iLUg76Bfxr85dRVwXw7nWTFPUNybkqquBQPHEJzE2E3zeeFGsERuRTGk9lktDZ0MRiVp226nJcxG7G827tupHAKzphISTxEfdMw6UoalEnn8iP31G3scn5siBC95rMLxEgKtNamOyjfgQf3IKuYoQl2ofeyYvD2VD9szNfFKq3cqNTUSGoGC_x5_aeFLRJZgkpa6Hg1x0rFkkXA3zNfhX8s7pBRbmWiBuOwhzh0hAxdxKRbPRnvR2PQJ2AI0FaVs2P3qUgfp9-Pwz3uvm-ux3YQhfdcf4Kt6nxLkdXGhHkrbiA7AFncf3VmbscdXeF7Ob50ljgovuGx63VMgBwcfN20rCrQFiyL2OBQIMoAXpbnzrIUaTYkiAQZfMopmN-xbRuPoSwsGIHF0BVwuxFR8bi70kov1D72NwflmrtvAEk4PNiUvanuO3obvCeJWRxn9_WwiFmM2GlbTpXr-DBmtd-g410kPpEKZSI8B68UAX-w79XT36a1gw2nhudF5_1IQ7s</a>	Picture of a young man jumping in the bay. The post gives a location and date.	Friends of OP as not posted in a group, just their own page	Local Cardiff photographer who posts a lot on the Cardiff Photography Club FB page.	3 likes and a negative comment towards jumping "Even though there is a continuous ban on swimming in the bay, there's no official warning about heavy metal pollution, which was the main reason they banned any water sports that involved getting in the water in all parts of the bay/docks in the beginning, but there can't be any high risk other than accidental drowning otherwise they wouldn't have let the triathlon competitors swim in it today. So other than the usual waterborne diseases, infections and possible accidental drowning it seems quite safe"
Porthcawl Harbour wall					
Blackweir (Cardiff)	Links to previously mentioned jumplife videos				
Blue Lagoon (Abereddy)	<a href="https://www.facebook.com/ben.seal.90/videos/10150234082320521/">https://www.facebook.com/ben.seal.90/videos/10150234082320521/</a>	homemade video of friends tombstoning in Blue Lagoon. There is no other information	Friends of OP as not posted in a group, just their own page	Seems to be a regular man, with no major interest in tombstoning	2 likes and 1 comment
St Nons (St Davids)					
Pointz Castle					
Haroldston Bridge					
Tenby Harbour					
Ceibwr Bay					
Black Rock (West of Lydstep)					
Milford Docks/Harbour					
Hobb's Point					
Stackpole Quay					
Porth Dafach (Anglesey)					
Porth Trecastell (Anglesey)					
The Creek (Amlwch)					
Pigeons Cove, Great Orme (Llandudno)					
Inland					
Pont y Pair Bridge					
Waterfalls (Neath Valley)	Jump life video already discussed				
The Island (River Usk)					
Quarries					
Vivan Quarry	Jump life videos already discussed				
Glynrhonwy Quarry					
Burley Hill Quarry					
Pant Quarry (North Wales)					
Trimm Rock Quarry					
Ifton Quarry					
Dorothea Quarry					
	<a href="https://www.facebook.com/watch/Tombstoning-channel-294392151091289/">https://www.facebook.com/watch/Tombstoning-channel-294392151091289/</a>	A small channel with 26 likes and no uploads in the past 2 years. There are multiple homemade videos of them tombstoning in Porth Dafach, Devils Point and Plymouth. All videos seem to be of teenage men enjoying themselves rather than sharing locations or how to jump safely.	Friends of the poster and other people who enjoy tombstoning. The videos don't have the best production quality so seems more like a hobby than a way to make money	N/A	between 0 and 5 likes with no comments

Facebook					
Cliff jumping + location	Link	Description	Perceived target audience	OP description	Likes/Comments
Coastal					
Between Limeslade and Langland Bay (Mumbles)	<a href="https://www.facebook.com/photo/?fbid=10152060432545790&amp;set=basw.AbpeWdeJTby7ImX8SGWZgLGvN1n4_rLmfzwhZ_BRUBTRVTNBdz">https://www.facebook.com/photo/?fbid=10152060432545790&amp;set=basw.AbpeWdeJTby7ImX8SGWZgLGvN1n4_rLmfzwhZ_BRUBTRVTNBdz</a>  QGa9iXbjRfKJfmoLg2oIR6HHe8wyo_4oi4X0TZeIK850iA6eaCPHs1WCrTZEZgWIDA4zWVpjg6uEguo1nrh6uXYuRCzhrG1135jdUjln_vzRvVOCiIGDValw&opaqueCursor=Abri1VxRFGDUK_Uf2kurwNcC4Bgdcu1WSZ9F6wNy0tSk48a4Bkw6lpEvSamC13WtRfM3KJFon4-oaqr0LZc9B2sT0cMeigjlcnnH9XV9Zm2lxEK5mwtzti8XaYWC074Qrkt-46vjQfRJAcky5E2TXNgTjzhF54EKNYr6Cei4yLpDMIXBsGbkN9RrGZ73geVkfefTN_GnLI2yAFMnRhqoCoYq5D-6ds9amc4_m35nWsywWw8mydDF32uLHvJ4nWd2ZELZvzhXnPrj8A9KjYrZH6VDtkw6ZOuplLxwvf2mGkH77F8Sb5i04bVfMT2PsTCVI7Cs-SV56yAsivhxeuL2NBc0Yi-xq6LHrAouwxKXBUQ0BGuhfca9N3jk9BASE-MtfzBSREXsGcn61cbzH7_4_7E8_XZKEENxwLEq-YGR4gNj4vOZHkIJRXSVe4OuHGpyXr2DnJP8n5bEu333qcbFVw4EQcz9IZB7dsPflpuOzqUgZSTX-s5NUQFVwHpGtK_WijInWQYN_hFa8ec7oParXgKrPGg-1XXyM-QNuK39f6niaDDku_WEuyI3oDem7b_16P2DRiLoAupZ F3Yhp7fLQubN_WidJn6YnQAo7wUqAaCwJ8AUyBvyR4RhUfByPqZcs8FPtQONV6fvwV56oOEs9-0TrCTOFQ72LzzYHoI7vH5Tf3k7WEXYBKSIB-wpN5XPeaZWM8_ERxMRvndNc25AXob8B9V1gKcQoBV0etTIGNF_jiHLYaRz52LkZo-8tuSYpjbz5Ux8C7tr1Xne aX18xIGcVfju9GwMUjWZlyGjO1o3KzlyW4h-9eZEyIvJ EjOlVedJzKUf6h1YOb6nA5h1LSM2j70lPalEKHVqX3p yihnd1ZID6CZahzEAMn8q0Xvg52gCmgj-HxPg_ZR5ihL4PziGZfVAAng1iRiFO_TyXulzD4OrMJgb3 ZyDT68htN8cu2rzc3UQA0IrdHIAHYyNgkarBhjdazkG1c fYROB0o4YFpLeVdvHLV5ItDKwp0Y1B1eS1KjMWPj9A WiiN1OgMvr26KJBJqumRd1TcypXiOQMowa4NRGyaawsUIPv9_ieG6ecU7gV-1KjDYxnhKRRhBD_69A9ZGctNdQeZ0IYK0uKdD4a23i0oi4ev_-G1Yy8OHGdOemQ8_t-S1rveP_SCFy9Uldr929r6Jzye6kPx1WCp9Hjzpdg_Vu3tvd56MMqar51AIFT-Oih1avZ4fcMrI8sr3BIK354b8tWnvXbT_EnajSMYHkFyf v04E-ulj5R1bESWq679Ps3wS9n3r1arkYjvIPPzoKoY2riF7uccaplDC8zTPz3toBERduoyO4X29BOD1BFXeZzltbtkpNk_TLLGMO4RKHyZKp3iI6fyBkFagMmCfaeR-YmrpFuUf5D8IJEKZwXSH2IFOP_52G_Skl-mI0sYn8VamQLPQ	Picture of someone's toe with gashes along the top. Mentions that this is a cliff jumping injury but they still had a good time.	Friends of OP and not posted in a group, just their own page	No cliff jumping posts other than the one linked, seems like a normal man.	3 comments and unknown number of likes
Cardiff Bay					
Porthcawl Harbour wall					
Blackweir (Cardiff)					
Blue Lagoon (Aberiddy)	<a 6"="" href="https://www.facebook.com/photo/?fbid=632367453500695&amp;set=basw.Abrck--rEPhnQIT38oTv-Ts5PWBURkKzjUo6gi3lV5Uv9qgVpva1T9NuMOyFqxv3-NeKknURxLwv3MjEkyalGjiWkjgRGIpBZQaXJb0lpiVAQzL6VEuR502qpoux7AQp04D2P4xvmDgDlIz41sDWDCbl76loL6-tWz6ef0Cm_8g&amp;opaqueCursor=AbpaqtdmuyZKCxasFEX-LtStHHeTDBYi9ymHmvr7W2cKUatXEuKrgLOWI5g-0Rz9Cio4mNszMwVY5xga-Tdyj5mtWH5o58v8tpWyGx0EHkt_yMDJ2sy3YuoAlrravNnpebVDFpOs8KsrjWbXYOqGcqVprPwU5g8OfeOwZwkHhV1CfHJVApJfXOBSK2sbsltmd3uOBSrqrDojnOXmkMcopoTB7Wx_2P3ESK1pwZMLMMVU3QuNI8J_ymPDFZ9RgY5_kbFD6WbKnfkhZ4XbmmkHCOHTpHnhvC1K9EHnc1MY9UA2pVbv9UO_V_hWRjGFFWarlGH5d_rxxHfxA7nxPPgl3XA2LIBTSCXsgcR-gY0n8QjtSZMOMH_4h8OTXbbXOH4bhKWimKRd6Gxo9XVn-h5ozafNqzvUWF7uiqElgTsu-IkozPa4Tp7-EldTkkC4Mdxvclm0uzEaL1rKqu0HbB0eJRfmUJ1hRHlk7DEx-6c8KkGk5eWTTTEOj7brEVCyjh8REKL-Qokr--mdUTsye_2bfvxP6BrrWBELFrjTpAbs1gs2hNH_GCHxrnoIEIrdQwopi1Wi8hyID2ACKWjoQXfxu1WLu6hZMA827GIxedSylD5_gINiYWd_ixglgwUWGUe3Af3WQEWalsy3AmBB4peqlvCl3EYyGWSNFgg1n1fByF4fKyxvOpnXThL8vvFC165Tg5WtUhpqarTK3eQXY1du-w7k6-APeXsyWx29Xpe3Eqf61rnn3p1gkQrPM6c3eBAesiDglIkjVWUM5gtGZKkgFiczfk-MvXaUYg0wPVe84QUJyAel8ffakwAwAM8WeEx_-Wl18vj4DM9rq1p08ua3xxqos2xcA4LaFz14K_66jYrdLuvFuBH4NTSpeyJwJV2aLqxH16aTbJkLcOcwDnhjNfL6z_5KAQtGxvKDrEac3QMok4TpagP151eMliimJWY3OxCSVdAkDM5vUweaxN7jSmGy65IWgeau5gU8AMbg7F1B-t8DJWd4YYainfQJj3c-fp5rT0x41W-BELx-CNTQqMeeh62H0JRHxNyzHVWwi48NSJ0mWZ-oVzq5sKjQjy4Z6ZWu7Gf9c2j3n-NgXVZCg0cGEEt69upGA9McvNieCcupc1Wsj8wr1fdosyoDPgdqMzGy77CwBh4mbRVD4rEbK8u9iO7-S2BZyom8aAXY_QrI8IRRM7LI&lt;/td&gt; &lt;td&gt;Picture from above of a man cliff jumping. No other information in the caption.&lt;/td&gt; &lt;td&gt;Friends of OP and not posted in a group, just their own page&lt;/td&gt; &lt;td&gt;No videos of cliff jumping but a few of him swimming. Is a man in his early 20s&lt;/td&gt; &lt;td&gt;4 likes and 11 comments. One particular comment by the OP mentions how he needs to improve his swimming before he goes again.&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;St Nons (St Davids)&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;Pointz Castle&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;Haroldston Bridge&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;Tenby Harbour&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;Ceibwr Bay&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;Black rock (West of Lydstep)&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;Milford Docks/Harbour&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;Hobb's Point&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;Stackpole Quay&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;Porth Dafach (Anglesey)&lt;/td&gt; &lt;td&gt;Jump Life video&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;Porth Tre Castell (Anglesey)&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;The Creek (Amlwch)&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;Pigeons Cove, Great Orme (Llandudno)&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td colspan=" style="text-align: center;">Inland</a>				
Pont y Pair Bridge					
Waterfalls (Neath Valley)	Jump Life video				
The Island (River Usk)					
Quarries					
Vivan Quarry					
Glynrhonwy Quarry					
Burley Hill Quarry					
Pant Quarry (North Wales)					
Trimm Rock Quarry					
Ifton Quarry					
Dorothea Quarry					
	<a href="https://www.facebook.com/Cliff-Jump-UK-1628957910722283/">https://www.facebook.com/Cliff-Jump-UK-1628957910722283/</a>	Seems to be a cliff jumping centre that teaches people how to jump safely. There has been no activity on the page since 2015. Based in Dosthill quarry	People who wish to learn to jump but aren't brave (or stupid) enough to do it without some sort of safety guidance.	N/A	Very few posts with no engagement

Facebook					
Cliff diving + location	Link	Description	Perceived target audience	OP description	Likes/Comments
Coastal					
Between Limeslade and Langland Bay (Mumbles)					
Cardiff Bay					
Porthcawl Harbour wall					
Blackweir (Cardiff)					
Blue Lagoon (Abereddy)	<a href="https://www.facebook.com/norah.mooney/videos/349435543210451">https://www.facebook.com/norah.mooney/videos/349435543210451</a>	Video from afar of people cliff jumping at the Blue Lagoon. Seems to be an instructed group	Friends of OP, as the post isn't posted in a group	Just a random woman by who decided to film the jumpers.	36 likes, 9 comments and 109 views. Comments are mainly her friends mentioning how much they want to give it a go
St Nons (St Davids)					
Pointz Castle					
Haroldston Bridge					
Tenby Harbour					
Ceibwr Bay					
Black Rock (West of Lydstep)					
Milford Docks/Harbour	<a href="https://www.facebook.com/photo/?fbid=370627810102273&amp;set=basw.AbqEUKwGgqdKv49EZD6m_x9Q6fM-9lwS7JrxeVfHHn14G_r8FPQj3Q2Ps7Jx35zo8620WgCs1VNGYTVeXhHcV08jwTO6kNaD58BEi0PTQ4QMd9C1k7CZnLYTpUGX8S5NHYzDuGpqAE7PCdOeOsE6ZTTkSU8MieKHfaLn7H26bga&amp;opaqueCursor=Abo_V9JJdx6_L_2mHY4zXX2FIR8x7IaZekcCU_oNbeTOVzb8DpTTeroZGeC2slzakZJumcG0e_r81JQL6_Hr1O78UP4YcahK13sOuYDjWqsmSlmPdmrPd79y1-gj4dPBBSvzt4jG-diyKcm6S2rbeoisBdeVuFHi015VI-DlsKI9e4rE0IYDiokC6Q_AiMOHjyWhM20Fyu4o5YcDR04ms9ZNIJPolgI8qkAYCN8yMONjLy2MKcOir3XpzawPhkvcU22qe-vhMsmqRIZakrUp6O-HkrrE2IB9_8EEVzW2-NicDBJly2tCsk1jEVCg2Q5R4yfKYjyEfKvmbSL_4ErDYCSZxAmpDBz_xU-AOQ3y26fZuUdk7II4L16_XnLvmKxBT_KhzvEfCbWZsmjYvLEmp--JNDBFCtByJ5-irARdWinat2o_vfYI92_cPYzi7JLxvZNCavzmSxhiZRGa-GSE3xMpvZa33TgWB9xw-CvxpgFm7HgLE_7BXfy0Xs_o7tAey5iuLxmQPCeKhtD65yffJ-0LOzsnLnrCu6dlfV6zZuS5sEMGX2yKq0u0-1U9c3VhknMFA5IKh3KwCcbBJNu_jWuWCiCkKQJbfp1ZIT5W30YD3HBp2xHEyFna5-MX-bzLQbijRVMcolnkb-_73wXQCcvfHb_iFIVszMV52sIHYnimJWbLzKoiABMqAhjKczqTMRECTLTNknqaf7VjX71-RphvYKydMmtBv6tBdfpV97Jg9iwI3jImQ4-i4CMAYFoXGAdMWJrknfSTyVXOP3c38wBtZgQ61HM-DoAluqsRTud_zDnUC77wr84B04wn8d_UuodWUq-Wm4bePkR7DcnJxeul-GogmqvzuLgQpdXsr1H_QkuPTcs3RdKXmyODUjOdXULgTClqNf4TTFb_XOFL8f-sU43OsWgN5THIFL_G9BeoPW5njDMRMQpn19IY4yV5KFyFni5Jr49ySfsZC7IWmN-C79-14rHly6dMwgbnHIX7C3K_ynwtGJSYXxFofianp_Z_kpzPhvEyv4ZRDlgw1BJ45mMLyldnjm4sjwD_zy7ye2pXzzwrW-SwnTTPkkHq2mQJPh7rms9hJdJPZVzxc8Ls3Y1Gng-qxRE1NOXf3IT7iwJTab6ZqX87_5aeXbqMlarkbyl8cW44PSDloa20iMr-Gm5Z01yJeog4sDk6ZAp7IR-BVfg3V0IdprOKbe5sPc8VIDqwXicpVCi9llkLxK_ANUK4RouWzlcwb">https://www.facebook.com/photo/?fbid=370627810102273&amp;set=basw.AbqEUKwGgqdKv49EZD6m_x9Q6fM-9lwS7JrxeVfHHn14G_r8FPQj3Q2Ps7Jx35zo8620WgCs1VNGYTVeXhHcV08jwTO6kNaD58BEi0PTQ4QMd9C1k7CZnLYTpUGX8S5NHYzDuGpqAE7PCdOeOsE6ZTTkSU8MieKHfaLn7H26bga&amp;opaqueCursor=Abo_V9JJdx6_L_2mHY4zXX2FIR8x7IaZekcCU_oNbeTOVzb8DpTTeroZGeC2slzakZJumcG0e_r81JQL6_Hr1O78UP4YcahK13sOuYDjWqsmSlmPdmrPd79y1-gj4dPBBSvzt4jG-diyKcm6S2rbeoisBdeVuFHi015VI-DlsKI9e4rE0IYDiokC6Q_AiMOHjyWhM20Fyu4o5YcDR04ms9ZNIJPolgI8qkAYCN8yMONjLy2MKcOir3XpzawPhkvcU22qe-vhMsmqRIZakrUp6O-HkrrE2IB9_8EEVzW2-NicDBJly2tCsk1jEVCg2Q5R4yfKYjyEfKvmbSL_4ErDYCSZxAmpDBz_xU-AOQ3y26fZuUdk7II4L16_XnLvmKxBT_KhzvEfCbWZsmjYvLEmp--JNDBFCtByJ5-irARdWinat2o_vfYI92_cPYzi7JLxvZNCavzmSxhiZRGa-GSE3xMpvZa33TgWB9xw-CvxpgFm7HgLE_7BXfy0Xs_o7tAey5iuLxmQPCeKhtD65yffJ-0LOzsnLnrCu6dlfV6zZuS5sEMGX2yKq0u0-1U9c3VhknMFA5IKh3KwCcbBJNu_jWuWCiCkKQJbfp1ZIT5W30YD3HBp2xHEyFna5-MX-bzLQbijRVMcolnkb-_73wXQCcvfHb_iFIVszMV52sIHYnimJWbLzKoiABMqAhjKczqTMRECTLTNknqaf7VjX71-RphvYKydMmtBv6tBdfpV97Jg9iwI3jImQ4-i4CMAYFoXGAdMWJrknfSTyVXOP3c38wBtZgQ61HM-DoAluqsRTud_zDnUC77wr84B04wn8d_UuodWUq-Wm4bePkR7DcnJxeul-GogmqvzuLgQpdXsr1H_QkuPTcs3RdKXmyODUjOdXULgTClqNf4TTFb_XOFL8f-sU43OsWgN5THIFL_G9BeoPW5njDMRMQpn19IY4yV5KFyFni5Jr49ySfsZC7IWmN-C79-14rHly6dMwgbnHIX7C3K_ynwtGJSYXxFofianp_Z_kpzPhvEyv4ZRDlgw1BJ45mMLyldnjm4sjwD_zy7ye2pXzzwrW-SwnTTPkkHq2mQJPh7rms9hJdJPZVzxc8Ls3Y1Gng-qxRE1NOXf3IT7iwJTab6ZqX87_5aeXbqMlarkbyl8cW44PSDloa20iMr-Gm5Z01yJeog4sDk6ZAp7IR-BVfg3V0IdprOKbe5sPc8VIDqwXicpVCi9llkLxK_ANUK4RouWzlcwb</a>	Polaroid of a man diving into Milford Quarry	Friends of OP, as the post isn't posted in a group	Random man who used to cliff jump in his youth. No other ties to the cliff jumping seen on his profile	18 likes and 5 comments
Hobb's Point					
Stackpole Quay					
Porth Dafach (Anglesey)					
Porth Tre Castell (Anglesey)					
The Creek (Amlwch)					
Pigeons Cove, Great Orme (Llandudno)					
Inland					
Pont y Pair Bridge					
Waterfalls (Neath Valley)					
The Island (River Usk)					
Quarries					
Vivan Quarry					
Glynrhonwy Quarry					
Burley Hill Quarry					
Pant Quarry (North Wales)					
Trimm Rock Quarry					
Ifton Quarry					
Dorothea Quarry					
	<a href="https://www.facebook.com/redbullcliffdiving">https://www.facebook.com/redbullcliffdiving</a>	The official red bull cliff diving page. Has 833k likes and is active every week. They highlight the people who cliff dive, locations and great jumps from their competition. Every search with "cliff diving" brings up a red bull result from their competitions.	Adrenaline seekers, fans of the competition, the general public		Tens of thousands of likes per video, with hundreds of comments and shares. Comments are mainly people tagging each other and commenting on the skills of the jumpers.
	<a href="https://www.facebook.com/page/199098633470668/search/?q=cliff%20diving">https://www.facebook.com/page/199098633470668/search/?q=cliff%20diving</a>	LADbible - search for cliff diving. Several posts - generally focussing on the dangers of the activity and featuring injuries and accounts of jumps that went wrong. RNLI/LADbible video has 6.2 k likes/615 comments and 2k shares.			

YouTube					
Cliff diving + location	Link	Description	Perceived target audience	OP description	Likes/Comments
Coastal					
Between Limeslade and Langland Bay (Mumbles)	<a href="https://www.youtube.com/watch?v=-c4QCehosQ8">https://www.youtube.com/watch?v=-c4QCehosQ8</a>	Low quality video of teenage men cliff jumping. Mainly just clips with rock music over the top.	Based on the OP description, probably other watersport enthusiasts or adrenaline seekers	Uploads mainly videos of skiing and watersports. One video has 6k views, all the others have less than 1k	Uploaded in 2008 and has 106 views and no comments.
Cardiff Bay					
Porthcawl Harbour wall	<a href="https://www.youtube.com/watch?v=qJ9EM6tVNHc">https://www.youtube.com/watch?v=qJ9EM6tVNHc</a>	Video of a drunk man jumping off the wall into the sea. Gets rescued by the RNLI	Tries to show how stupid the man was for jumping, so probably scaremongering other potential jumpers	OP posts mainly music videos or hiking. No other tombstoning videos. Gets roughly 60 views per video. Around 2.6k subscribers	1.4k views, with 35 likes and 16 comments. Comments discuss the jumper negatively
Blackwier (Cardiff)	<a href="https://www.youtube.com/watch?v=0R5BB1r6mVg">https://www.youtube.com/watch?v=0R5BB1r6mVg</a>	Video of kids tombstoning off the bridge on a sunny day. Mainly just clips of people enjoying the water rather than focusing on the jumpers	Video seems mainly to capture the day rather than get likes. Target audience is probably people who live around Cardiff	OP posts variety videos about Cardiff and the River Taf. Very few subscribers	1.7k views with 0 likes and a couple of comments about how much they enjoyed the river as children
Blue Lagoon (Abereiddy)	<a href="https://www.youtube.com/watch?v=9Bk8lwF7uFc">https://www.youtube.com/watch?v=9Bk8lwF7uFc</a>	Video montage of people tombstoning on a sunny day with music over the top. Video is mainly men in their early 20s	Adrenaline seekers or people looking to jump at this location.	Called naturally outdoors and posts videos of them urban exploring and swimming/cliff jumping. 154 subscribers	17k views with 141 likes and 55 comments. Most comments are enquiring about the location
	<a href="https://www.youtube.com/watch?v=einxE90fY5g">https://www.youtube.com/watch?v=einxE90fY5g</a>	Video montage of people tombstoning on a sunny day with music over the top. Video is mainly men in their early 20s	Adrenaline seekers or cliff jumpers.	1.3k subscribers. Mainly posts cliff jumping videos and gets around 500 views per video. Has multiple videos at the blue lagoon	10k views and 29 comments. Comments discuss mainly other jumpers or praising the video
St Nons (St Davids)					
Pointz Castle					
Haroldston Bridge					
Tenby Harbour					
Ceibwr Bay					
Black Rock (West of Lydstep)					
Milford Docks/Harbour					
Hobb's Point					
Stackpole Quay					
Porth Dafach (Anglesey)					
Porth Trecastell (Anglesey)					
The Creek (Amlwch)	<a href="https://www.youtube.com/watch?v=5vnJ7QPr4R8">https://www.youtube.com/watch?v=5vnJ7QPr4R8</a>	Old video of a young man cliff jumping. Less than a minute in length	The quality is low and there isn't much information in the description box, so probably just uploaded to share with friends.	Channel with 7 subscribers and a few other videos of random events. One other cliff jumping video at Amlwch Port	444 views and no comments
	<a href="https://www.youtube.com/watch?v=Np1HjZq7WUM">https://www.youtube.com/watch?v=Np1HjZq7WUM</a>	Old video of a young man cliff jumping. Less than a minute in length	The quality is low and there isn't much information in the description box, so probably just uploaded to share with friends.	2 subscribers and this is their only video	1.4k views and 1 like. No comments
Pigeons Cove, Great Orme (Llandudno)	Jump life video previously mentioned				
Inland					
Pont y Pair Bridge					
Waterfalls (Neath Valley)	<a href="https://www.youtube.com/watch?v=29ji70Xu1a8">https://www.youtube.com/watch?v=29ji70Xu1a8</a>	Video shows a crowd watching some teenagers jump from a waterfall. 15 minutes of uneventful footage	Evidently aimed at children/families as it seems to be a family channel	Channel with 1.8k subscribers. Seems to be a family channel showing live in Wales.	4k views, 216 likes and 32 comments. Mainly they discuss how pretty the waterfall is.
The Island (River Usk)					
Quarries					
Vivan Quarry	Jump life video previously mentioned				
	<a href="https://www.youtube.com/watch?v=e0mnlxHfnQk">https://www.youtube.com/watch?v=e0mnlxHfnQk</a>	Video shows an 18 year old doing Nikis leap. It's 4 minutes long and doesn't show much else. Someone shouts at them that they can't jump here but they disregard this. There is a disclaimer at the end about how the jumper wears a buoyancy aid so that he floats if he gets knocked out	Adrenaline seekers or cliff jumpers.	Same channel as the 2nd blue lagoon video. Called The Doveys	3k views and 6 comments on how this seems to be one of the biggest jumps in the UK
Glynrhonwy Quarry	<a href="https://www.youtube.com/watch?v=UUzF6q9qz6c">https://www.youtube.com/watch?v=UUzF6q9qz6c</a>	Video shows them breaking into the secret lake and tombstoning. Video is a 3 minute montage of young teenagers jumping with a soundtrack	Seems to be for showing off to their friends rather than anything else.	Channel seems to be part of The Doveys as they are linked in the description and have a conversation in the comments. They have 379 subscribers and a few other cliff jumping videos	924 views and 22 likes. Also a comment conversation between them and the Doveys
Burley Hill Quarry					
Pant Quarry (North Wales)					
Trimm Rock Quarry					
Ifton Quarry					
Dorothea Quarry	<a href="https://www.youtube.com/watch?v=DUcKQ5vLWnU">https://www.youtube.com/watch?v=DUcKQ5vLWnU</a>	Video is a montage of them cliff jumping at the quarry. There is a soundtrack and not much talking. Video is 6 and a half minutes long	Adrenaline seekers or cliff jumpers.	Same channel as the 2nd Blue Lagoon video. Called The Doveys	8671 views and 12 comments

YouTube					
Cliff diving + location	Link	Description	Perceived target audience	OP description	Likes/Comments
Coastal					
Between Limeslade and Langland Bay (Mumbles)	<a href="https://www.youtube.com/watch?v=OUqhfQVHOoA">https://www.youtube.com/watch?v=OUqhfQVHOoA</a>	Video montage of people camping, being at the beach and then cliff jumping.	Video seems to be for nostalgia purposes only, as there is nothing to promote the channel or cliff jumping	11 subscribers with less than 100 views on every video. Seems to be someones personal account used to show their holidays	68 views and 3 likes
Cardiff Bay					
Porthcawl Harbour wall					
Blackweir (Cardiff)					
Blue Lagoon (Abereddy)	2 sepeate videos from The Doveys				
	<a href="https://www.youtube.com/watch?v=WKISSZbi7FI">https://www.youtube.com/watch?v=WKISSZbi7FI</a>	Video highlighting the Red Bull UK cliff diving tour from 2012. It's 3 minutes of information on the competition and clips of the jumpers.	Fans of the Red Bull cliff jumping series, adrenaline seekers,	Channel called World of Freesports with 7k subscribers. Mainly seems to follow all types of extreme sports competitions. Videos get around 500 views on average	33k views, 103 likes and 9 comments
St Nons (St Davids)					
Pointz Castle					
Haroldston Bridge					
Tenby Harbour					
Ceibwr Bay					
Black Rock (West of Lydstep)					
Milford Docks/Harbour					
Hobb's Point					
Stackpole Quay	<a href="https://www.youtube.com/watch?v=hdFZp69bLwM">https://www.youtube.com/watch?v=hdFZp69bLwM</a>	5 minute montage of a few kids camping and cliff jumping in the quay	Video seems to be for nostalgia purposes only, as there is nothing to promote the channel or cliff jumping	Personal channel with 67 subscribers. Videos are from 7 years ago and are to do with slack-lining or swimming. Get around 200 views per video	1238 views and 8 likes
	<a href="https://www.youtube.com/watch?v=PLWEG9ELelc">https://www.youtube.com/watch?v=PLWEG9ELelc</a>	55 second video with quick cuts showing a man and his family enjoying cliff jumping in the quay.	Video seems to be to document the experience rather than promotion of anything.	30 subscribers, with most videos being short mountain biking ones. Gets roughly 40 views per video.	178 views and no comments
Porth Dafach (Anglesey)					
Porth Tre Castell (Anglesey)					
The Creek (Amlwch)					
Pigeons Cove, Great Orme (Llandudno)	Jump life video				
Inland					
Pont y Pair Bridge	<a href="https://www.youtube.com/watch?v=dUbP-yBgjSE">https://www.youtube.com/watch?v=dUbP-yBgjSE</a>	3 minute video from 6 ears ago showing young men jump off the Betws y Coed bridge.	The channel name is DENBIGHVIS/WXPM so I assume its meant to highlight stuff local to the area. So the target audience is probably local people?	Used to post videos from the local area but now has started to post guitar covers and general life updates. Has 5.74k subscribers and gets roughly 40views per video	5.3k views. 12 likes and 25 comments. Commets discuss the fact that police now stop jumpers and how that's a waste of resources according to them.
Waterfalls (Neath Valley)					
The Island (River Usk)					
Quarries					
Vivan Quarry					
Glynrhonwy Quarry					
Burley Hill Quarry					
Pant Quarry (North Wales)					
Trimm Rock Quarry					
Ifton Quarry					
Dorothea Quarry					
	ALMOST ALL THE VIDEOS HERE ARE SHARED BETWEEN THE 3 SEARCH TERMS. I was seeing so many duplicate results per search that I tried to group them based on the jumping/diving versus tombstoning. Searching cliff diving gave no new results				

Instagram					
#tombstoning	Link	Description	Perceived target audience	OP description	Likes/Comments
Coastal					
Between Limeslade and Langland Bay (Mumbles)					
Cardiff Bay					
Porthcawl Harbour wall					
Blackweir (Cardiff)					
Blue Lagoon (Abereddy)	<a href="https://www.instagram.com/p/CTSxcXXI0V6/">https://www.instagram.com/p/CTSxcXXI0V6/</a>	Clip of a man doing a backflip in the Blue Lagoon.	The hashtags are for adventure, cliff diving, tombstoning, backflip and Blue Lagoon, so I assume the audience is other cliff divers.	486 posts and 725 followers who seems to drive a van around Wales and walk up mountains. Actively posts	543 views. Comments are complimenting the video
	<a href="https://www.instagram.com/p/CUUfofIM37d/">https://www.instagram.com/p/CUUfofIM37d/</a>	Picture of a man cliff jumping	#cliffjumping #tombstoning #therapture #llstoost #wales #bluelagoon #pembrokeshire #dontlookdown, #adventure #topbombing Would assume these tags mean the post is aimed at other cliff jumpers and adrenaline seekers	346 posts, 300 followers. Posts variety of content with no focus on cliff jumping	20 likes, no comments
	<a href="https://www.instagram.com/p/CQWtY0sleKK/">https://www.instagram.com/p/CQWtY0sleKK/</a>	Panorama showing Blue Lagoon and people cliff jumping in the background	Not cliff jumpers, probably just friends of OP	416 posts, 308 followers. Posts mainly photography based content	19 likes, 3 comments
	<a href="https://www.instagram.com/p/CSUSST2opQ2/">https://www.instagram.com/p/CSUSST2opQ2/</a>	Video of people cliff jumping. Most seem to be wearing similar equipment, so probably part of a coasteering group?	Friends of OP. Tags are for Blue Lagoon, cliff jumping, tombstoning, Pembrokeshire and Wales .	138 posts, 1k followers. Mainly posts art made from things found on beaches.	487 views, Couple of comments praising the location
	<a href="https://www.instagram.com/p/CRYtGXrj04v/">https://www.instagram.com/p/CRYtGXrj04v/</a>	Video of a girl jumping in.	#bluelagoon #abereddy #ledgejump #abereiddi #tombstoning #sea #ocean #lagoon #pembrokeshire #wales #jump #slatequarry #cliffdiving #watersports #coasteering #outdoorwomen #adrenaline #adventurepeople #outdoorblog #adventureblog #travelblog #blog #outdoorwriting #weekend #weekendvibes #weekendmood #friyay #yousayjumpisayhowhigh #noqueueingforme #likeaneagle Probably wants likes more than finding an audience.	624 posts, 1.1k followers. Seems to post comments of them enjoying being outside.	571 views, no comments
St Nons (St Davids)					
Pointz Castle					
Haroldston Bridge					
Tenby Harbour					
Ceibwr Bay					
Black Rock (West of Lydstep)					
Milford Docks/Harbour					
Hobb's Point					
Stackpole Quay					
Porth Dafach (Anglesey)					
Porth Tre Castell (Anglesey)					
The Creek (Amlwch)					
Pigeons Cove, Great Orme (Llandudno)					
Inland					
Pont y Pair Bridge					
Waterfalls (Neath Valley)	<a href="https://www.instagram.com/p/CTKxFTDDJQY/">https://www.instagram.com/p/CTKxFTDDJQY/</a>	A picture of a man in front of the waterfall, a picture of the waterfall, and then a video of the man cliff jumping	#brecon #backflip #dive #breconbeaconsnationalpark #soloadventure #cliffjumping #cliffdiving #fourfallstrail #waterfalls #coldwaterswimming #nature #coldwatertherapy #wildswim #wildswimming #wildswimmersuk #outdoorswimmingsociety #tombstoning #ukwildswimmers #wednesdaymotivation. Has tagged UKWILDSWIMMERS in their post, so probably more aimed at wild swimmers than cliff jumpers. The tags also suggest this.	56 posts, 687 followers. Posts hiking and general outdoors content. A couple of cliff jumping posts but mainly hiking and swimming. Does have a highlighted story on his account called "Cliffjumping"	69 likes and a couple of comments
The Island (River Usk)					
Quarries					
Vivan Quarry					
Glynrhonwy Quarry					
Burley Hill Quarry					
Pant Quarry (North Wales)					
Trimm Rock Quarry					
Ifton Quarry					
Dorothea Quarry					
	<a href="https://www.instagram.com/timmynetles/">https://www.instagram.com/timmynetles/</a>	Posts skydiving and cliff jumping videos. Has 188 posts and 1k followers. Frequently pops up in #tombstoning			

<b>Instagram</b>					
<b>#cliffjumping</b>	<b>Link</b>	<b>Description</b>	<b>Perceived target audience</b>	<b>OP description</b>	<b>Likes/Comments</b>
Coastal					
Between Limeslade and Langland Bay (Mumbles)					
Cardiff Bay					
Porthcawl Harbour wall					
Blackweir (Cardiff)					
Blue Lagoon (Abereiddy)					
St Nons (St Davids)					
Pointz Castle					
Haroldston Bridge					
Tenby Harbour					
Ceibwr Bay					
Black Rock (West of Lydstep)					
Milford Docks/Harbour					
Hobb's Point					
Stackpole Quay					
Porth Dafach (Anglesey)					
Porth Trecastell (Anglesey)					
The Creek (Amlwch)					
Pigeons Cove, Great Orme (Llandudno)					
Inland					
Pont y Pair Bridge					
Waterfalls (Neath Valley)					
The Island (River Usk)					
Quarries					
Vivan Quarry					
Glynrhonwy Quarry					
Burley Hill Quarry					
Pant Quarry (North Wales)					
Trimm Rock Quarry					
Ifton Quarry					
Dorothea Quarry					
	This tag seems much more international than #tombstoning. #tombstoning seemed quite UK focussed, whereas this tag is far more varied. #tombstoning had less than 5k posts, whereas #cliffjumping has 600k posts. Finding specifically UK based posts, let alone Welsh, is essentially impossible.				