



Department of Conservation
Te Papa Atawhai

**INCIDENT INVESTIGATION
CAPE KIDNAPPERS ROCKFALL
23 JANUARY 2019**

Contents:

	Page
1. Particulars of Incident	2
2. Executive Summary	3
3. Injured Persons	4
4. Overview of Investigation	4
5. Description of the Incident	5
6. Post Incident Response	5
7. Background	6
8. Description of Findings	8
9. Contributory Factors	16
10. Conclusions	18
11. Recommendations	18
12. Signatures of Investigation Team	22

Appendices

1. Map of walk and amenity area	23
2. Photos of the rockfall	25
3. Day hike map	26
4. Newspaper clippings of past events	27
5. Visitor risk matrix	28
6. Warning signs NZ Police and DOC	29
7. Warning signs Hastings DC and DOC	30

1. PARTICULARS OF INCIDENT	
Title of Incident: Cape Kidnappers Rock fall	Date ICAM investigation completed: 28 February 2019
Reporting Line: Lower North Island: Hawkes Bay	
Accountable Operations Director: Reg Kemper	
Date and Time of Incident: 23 January 2019 1430 hours.	

2. EXECUTIVE SUMMARY

1. On 23 January 2019 two visitors from South Korea were returning to Clifton from a walk to the gannet colony when they were struck by a rockfall while walking along the beach. They had little time to react, ran toward the sea where they were pushed out further into the ocean and struck by rocks. They were both seriously injured.
2. The Gannet Adventure Tour concessionaire, with a combination of tractor and trailer and people walking (est 60+ people), were in the vicinity.
3. There were failures at multiple levels in implementing the Department's organisational risk and visitor risk management policies. Failures resulted in misunderstanding and confusion around risk, promotion of the hike and what part of the hike was being assessed.
4. The Department has promoted a walk that is largely not on Public Conservation Land (PCL), therefore placing itself in the position of needing to ensure that the risks associated with the walk were appropriately managed. For the most part this did not occur.
5. The Cape Kidnappers Day Hike is included in the category of day visitor where visitors will have "a low tolerance for risk"
- 6.. There are no agreements in place with other landowners, particularly the Hastings District Council and the private landowner.
7. In the Asset Management Information System (AMIS) it is acknowledged that the Department manages 1.1km for which there were sound management practices in place. But these practices were not reflected in the remainder of the walk being promoted by the Department.
8. There was confusion by staff at various levels on what section of the walk was being discussed at any point in time, particularly in relation to risk.
9. The promotion of the day hike increased exposure to risk (i.e. tide and rockfall), simply due to increased visitor numbers and increased exposure time to rockfall.
10. The Product Development Team placed focus on iwi and community consultation as well as "ground truthing", but visitor risk was not explicit in this process. Ground truthing did include an element of safety but was not explicit enough to address the requirements of the Department's Visitor Risk Management SOP.
11. The Product Development Team assumed that all tracks were being managed by operations as part of normal business and risk was part of that management.
12. In the 12 months prior to the incident there were a number of opportunities and indicators raised by various staff to the risk of rockfall, but these were not followed up, predominantly by the Recreation, Tourism and Heritage Team.
13. LNI Region were slow to react to the task assignment provided by the Product Development Team which resulted in minimal consultation and information being provided. The Lower North Island Director of Operations signed off the inclusion of Cape Kidnappers as a day hike.
14. There was only one risk assessment of the full walk prior to the incident, and this resulted in 'unacceptable' risk and therefore the need for a geo tech assessment. The Napier District office carried out another risk assessment nearly 12 months after this but appeared to focus only on the DOC managed track, not addressing the earlier concerns on risks for the whole walk. The risk was changed to 'tolerable' thereby removing the need for a geo tech assessment, to just warnings.
15. There was no evidence of meaningful consultation on risk with stakeholders.
16. Warnings in place up until the time of the accident were mostly focussed on the tide, with rockfall limited to "small print", both in signage, the DOC website and brochures.
17. Given that the whole walk was being promoted by the Department, not just the smaller DOC section, risk should have been assessed at least as unacceptable meaning a Geotech assessment should have been commissioned. This was a result of failure, in part, in the application of the Department's visitor risk management system.

3. THE INJURED PERSONS

Name: [REDACTED] (South Korean tourists)

4. OVERVIEW OF INVESTIGATION

Investigation Team:

[REDACTED] - Asset Planner
[REDACTED] - Health and Safety Manager

People Interviewed:

Name:	Designation
[REDACTED]	Principal Advisor Visitor Risk
[REDACTED]	Visitor Advisor Manager
[REDACTED]	Asset Planner
Bruce Parkes	Deputy General Director Visitor and Policy
Gavin Walker	Projects Officer
[REDACTED]	Regional Visitor Planning Manager
[REDACTED]	Operations Manager (Hawkes Bay)
[REDACTED]	Senior Ranger Recreation
[REDACTED]	Planning Manager
[REDACTED]	Senior Service Designer
[REDACTED]	Operations Manager Tongariro
Graeme Ayres	Director Business Assurance
Reg Kemper	Director Operations, Lower North Island
[REDACTED]	Injured in incident
[REDACTED]	Service Designer
[REDACTED]	Senior Engineer
[REDACTED]	Gannet Adventure Tours
[REDACTED]	General Manager, Tourism Hawkes Bay

Conversations also occurred with a number of internal staff over various aspects of processes. These included:

[REDACTED]
[REDACTED] Harry Maher, Director Health and Safety [REDACTED]

Documents reviewed:

DOC Risk Management Policy - DOC-2224884
Visitor Risk Management Policy - DOC-1562377
Visitor Risk Management SOP - DOC-2852133
Visitor Risk Management Guideline - DOC-2852137
Visitor Site Risk Assessment spreadsheet - DOC-3157990
Potential Day Hike list - DOC-3048793
Initial 2009 Risk Assessment - DOC-496433
Area Manager sign off of above assessment - DOC-603017
Visitor Risk Assessment from Hawkes Bay, Cape Kidnappers site assessment - DOC-3054993.

Various emails from staff, including:

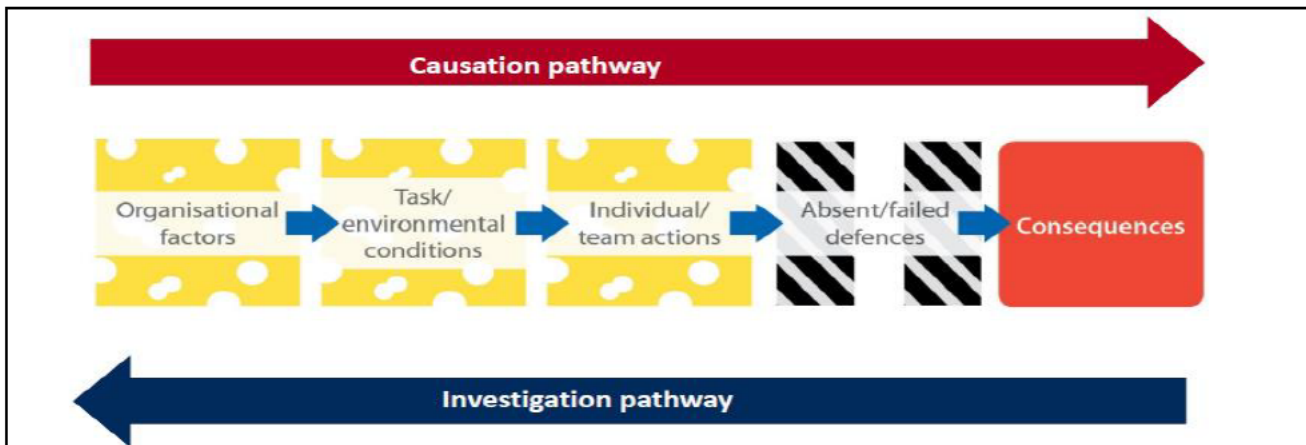
- [REDACTED] Gavin Walker, [REDACTED]
[REDACTED]

Operations Manager [REDACTED] sign off of 2009 assessment (DOCDM-603017).

[REDACTED] memo to the Products Development Team on the management of visitor risk - DOC-3100960.

Investigation Process:

The investigation team has used the Incident Causation Analysis Method (ICAM) process which has been well embedded into the Department's health and safety system for some years. ICAM is an internationally recognised analysis tool that sorts the findings of an investigation into a structured framework consisting of four elements, as shown in the diagram below:



Because the rock fall, as a natural event, could not have been prevented the focus of this investigation is on whether there has been a failure of Departmental processes and systems that mean that members of the public may have been unnecessarily exposed to risk greater than could be reasonably expected of a walk of this nature.

5. DESCRIPTION OF THE INCIDENT

On 23 January 2019 at approximately 1430 hours two Korean tourists [REDACTED] were hit by a significant rockfall while returning on the Department promoted Day Hike to the Gannet colony at Cape Kidnappers (see map Appendix 1).

The size and scale of the landslip can be seen in a photo taken at the time of the incident – see series of photos in Appendix 2.

The two survived the ordeal by heading towards the water when the rockfall occurred. They decided on this route at the spur of the moment rather than running along the beach, [REDACTED]. They were pushed out into the sea and submerged while being hit by rocks. Eventually they surfaced and were assisted in their rescue by people who were nearby. This included a couple in a four-wheel drive, people in a boat, and people from the concession operated by Gannet Adventure Tours who just minutes earlier had passed through the same spot.

Police and ambulance were contacted, and injured persons were evacuated to Hastings hospital by ambulance [REDACTED] and helicopter [REDACTED].

The incident did not occur on land owned or managed land by the Department. The Department did however promote the walk which was for an icon site and was one of four Day Hikes promoted throughout the country in 2017 in conjunction with Tourism New Zealand.

6. POST INCIDENT RESPONSE

Because the incident occurred on land administered by Hastings District Council, the site and whole walk was closed under the Local Government Act 1974 by the council who assumed responsibility after the incident. They also contacted WorkSafe NZ to report the incident. (The Department has also closed the DOC portion of the track and put warnings on the website. The incident occurred on the first day of [REDACTED] appointment to Operations Manager and she has taken lead on incident support.)

The latest media release by the Hasting District council is below:



Cape Kidnappers
update - Feb 13.pdf

February 13, 2019

Third slip at Cape Kidnappers

Investigations into the landslide at Cape Kidnappers are continuing this week, taking into account a third slip that occurred at the same site on February 7.

This slip from the top of the hill followed the initial landslide on January 23, and then another large slip on Saturday, February 2.

The ongoing instability of the area means access to Cape Kidnappers via the beach from Clifton, which was closed by the Hastings District Council after the first slip, remains closed at this point in time.

Altogether a large amount of material has collapsed onto the beach, estimated to be in excess of 30,000 cubic metres.

A review of the survey data indicates that the second slip saw up to nine metres in depth lost from the cliff face, and the third more recent slip saw the top of the cliff move back by around seven metres.

The area remains unstable and prone to further movement and rockfalls.

A geologist engaged to assess the area continues to gather information with urgency to report back to the council, and the area is continuing to be monitored in light of the high seas battering the region's coastline.

Public safety is a priority, and people are instructed to continue to heed the signs that have been placed at the beach and stay away from the area until further notice.

ENDS

7. BACKGROUND

History:

Cape Kidnappers is a destination people have visited since before the 1950s. In late 1953 tractor rides are offered by a local farmer began along the beach and a commercial concept evolves into Gannet Adventure Tours.

Timeline:

2000-2001: Asset tracks baselined and entered in VAMs

2001-2005: Huts with geo hazards were identified along with geological assessments of campsites. Tracks were not included.

2009: Rollout of the Visitor Risk process nationwide, where risk assessments were done on excel spreadsheets - not yet integrated with AMIS.

21st October 2009: First visitor risk assessment of Cape Kidnappers by [REDACTED] (ex DOC employee). This related to the 1.1km DOC track. The risk was described as "unacceptable", with a medium consequence, and 5-40 year likelihood of occurrence. The recommended action was "signage at start point and brochure" with comment "make warning information more prominent on proposed entrance sign"

June 2010: Cape Kidnappers selected as an icon site under a nationwide classification process.

8 July 2010: Area Manager [REDACTED] signed off the visitor assessment that was completed in October 2009.

Late 2016: Talks with Tourism New Zealand by the Product Development Team (part of Recreation, Tourism & Heritage in National Office) around Short Walks / Day Hikes

25 May 2017: Task assignment regarding criteria for Short Walk and Day Hike sent out to all Operations Managers by the Products Development Team. Key members of that team included [REDACTED] (Project Lead) and Gavin Walker (Accountable Manager). The accountable DDG was Bruce Parkes. Responses requested back by 13 July 2017.

9 June 2017: [REDACTED] notes in email regarding Cape Kidnapers walk to [REDACTED] (Improvements Manager LNI) and Reg Kemper that this walk meets initial Day Hikes criteria and is added to Potential Day Hike list.

13 June 2017: Day Hike list updated to include Cape Kidnappers.

12 July 2017: ██████████, in the role of Senior Risk Advisor for Business Assurance, raises concerns to the Products Development Team on the management of visitor risk throughout the Department (DOC 3100960).

02 August 2017: LNI Director Reg Kemper (RK) signs off on the three criteria for Cape Kidnappers (iwi consultation, community consultation and ground truthing) and reports this back to the Product Development Team.

04 August 2017: Final list of 10 Short Walks and 5 Day Hikes developed. This includes Cape Kidnappers.

1 September 2017: Product Development Team request staff in Recreation Tourism and Historic to walk all Day Hikes after a film crew working on the project got lost on the Te Whare Track.

4 September 2017: ██████████ walks Cape Kidnappers for the Product Development Team and raises concerns on risk especially the 8km+ section not on DOC land.

6 September 2017: Risk assessment carried out by ██████████ for whole of site (i.e. including the 8km+ of non DOC land). The assessment outcome was “unacceptable” with a 1 5 year likelihood meaning a geotech report was recommended.

6 September 2017: Decision to retain Cape Kidnappers as a day hike as per e mail Gavin Walker (GW) and ██████████.

7 September 2017: Tourism Minister Paula Bennett and Conservation Minister Maggie Barry announce planned campaign of Short Walks and Day Hikes in Napier Office, highlighting Cape Kidnappers as one of the Walks and noting the official launch is in October.

7 September 2017: ██████ raises concerns over internal media advisory referencing Cape Kidnappers, noting risks of “seacliff rockfall issues and tidal issues”. He also notes it crosses private land with no guarantee of permanent access. Sent to ██████████, Product Development team member.

5 October 2017: Workshop between DOC and Opus International to discuss key site issues regarding the DOC section of the track. Opus were commissioned by DOC to assist with options in the development of the gannet colony, DOC walking track and amenities area. This does not include the part of the beach walk not on DOC land.

9 October 2017 ██████████, Web Communications Advisor requests ██████████ Geo Spatial Information National Lead (Acting) to upgrade GIS track to reflect whole of promoted track (up until this point only 1.16km of DOC track managed by the Department was showing on GIS maps).

11 October 2017: Task Assignment from Gavin Walker (GW) to Operations teams to review maintenance and warrants of fitness for Short Walks and Day Hikes. This includes the aim that “all visitors get home safely”.

12 October 2017: ██████ raises concerns to his manager GA (Director Business Assurance) via an email on risk regarding Cape Kidnappers and Great Day Hikes. GA supports ██████ to continue his work on addressing these concerns.

13 October 2017: Short Walks / Day Hikes analysis, developed by the Product Development Team, raises questions on landowner consultation, but no specific visitor risk at site raised.

18 October 2017: Follow up from Acting Operations Manager ██████████ using ██████████ email to ██████████ on ██████ risk assessment for site.

19 October 2017: ██████ follows up on request on ██████ risk assessment by entering comments into the spreadsheet noting “no reported or past incidents in the last 20 years”.

25 October 2017: ██████████ asked by ██████ to review Cape Kidnappers Opus report. ██████ states that ██████ assessment, and visitor safety overall, is not well enough reflected in the Opus report.

26 October 2017: ██████ e mails concerns of risk of rockfall at Cape Kidnappers after GA requests update on how Visitor Risk has been integrated into Short Walks and Day Hikes. ██████ mentions it has not been sufficiently addressed and notes “at least 3 of the sites have significant natural risks capable of producing mass fatality”.

27 October 2017: Campaign launch event for Short Walks/ Day Hikes

27 October 2017: [REDACTED] emails GA following the launch with further concerns regarding unaddressed natural hazards, including Cape Kidnappers.

27 October 2017: [REDACTED] states "A team process approach could be taken to review the VRM analysis with local team to ensure that necessary actions are delivered before GDW launch and/or before peak visitation". Sent to Operation's [REDACTED] and Product Development team.

7 November 2017: After a GIS software upgrade the track information was altered to start from Clifton on, making the length 9.5km.

10 November 2017: Opus report released to DOC. Focus is on DOC section of track although mentions that options for the entire walkway be considered as part of an overall site masterplan. The report does mention coastal erosion along the beach.

15 December 2017: Assyst request from [REDACTED] wanting information on Opus report of Cape Kidnappers

8 January 2018: [REDACTED] (Visitor Planner) responds to Assyt request regarding Cape Kidnappers, notes issues of risk.

1 February 2018: [REDACTED] gives presentation (DOC 5411592) to Tourism Task Force, noting risk at Cape Kidnappers of seacliff rockfall. [REDACTED] advises the investigation team that in subsequent months he gave the same presentation to all Deputy Director Generals and a number of Directors throughout the country.]

8 February 2018: [REDACTED] raises risk issues to GA, GW and Harry Maher following a promotion of Day Hikes and Short Walks in Air New Zealand magazine which cites Cape Kidnappers.

14 February 2018: [REDACTED] gives presentation (DOC 3189155) to Internal Strategy and People Leadership Team, includes pictures and concerns over Cape Kidnappers.

February 2018: Concerns raised by Gannet Adventure Tours to [REDACTED] in Planning/Monitoring/Reporting team on visitor risk with tides and rockfall as a result of a user experience survey. [REDACTED] told concessionaire to write to the Operations Manager and if no luck to go to the LNI Director.

6 June 2018: Engineer [REDACTED] highlights concerns on risk including rock fall at the cliffs beside the Cape Kidnappers walk in an e mail to [REDACTED] (Business Analyst) as part of the Asset Immediate Response team. Advised to follow up with [REDACTED].

27 July 2018: Cape Kidnappers monitoring report released by the Tourism team on Short Walks and Day Hikes showing tramper concerns of risk.

23 January: Incident occurred.

8. DESCRIPTION OF FINDINGS

The Cape Kidnappers Walking Track was developed as part of a network of five 'Day Hikes' selected from existing tracks. The network was developed following extensive domestic and international research undertaken in 2017 with Tourism New Zealand to identify the types of activities visitors most want to do. The research found that there was high demand for short walks (30 minutes to 3 hours) and Day Hikes (3 to 8 hours), and that there are seven key factors people consider when deciding on the suitability of a walk, i.e.: the landscapes and scenery; time to complete the walk; time available on the day; the terrain of the walk; unique experiences to see, safety and the facilities available on the walk. There is a clear expectation that:

*"Our visitors expect to get home safely too. Research shows this group has little experience in the outdoors and a low tolerance for risk. **Actions:** Resolve any visitor safety issues immediately or close the site and resolve them ASAP."*

The key message is that the promoted Cape Kidnappers walk should have a **low tolerance for risk** as

far as visitors are concerned.

Informed by the research, DOC proposed a list of potential walks and then checked with local rangers, iwi and communities to see which of these existing tracks were ready to provide experiences appropriate for people's time, competencies and expectations.

Walks were selected by a Product Development Team under leadership of the Recreation, Tourism and Historic Unit involving a range of DOC staff. Local operations staff assessed whether walks met specific criteria. As part of this exercise some walks were withdrawn on staff recommendations.

For the Cape Kidnappers Walk, staff from DOC's Napier office provided advice on stakeholder views and operational considerations.

Promotion of the walk includes a specific [DOC website](#) that shows a map (Appendix 3) and brochures. The two South Korean visitors used the website to plan their walk. In fact they used the DOC website for most of their planned trips around New Zealand, being keen walkers and nature enthusiasts. This suggests that there is heavy reliance on the DOC website for information, including safety.

The trip is 9.5km one way if starting from Clifton. The Department manages just 1.1km of the walk, as shown in Appendix 1.

On 7th November 2017 there was an upgrade of GIS track information (as requested by Web Communications team) to reflect the whole promoted track. The map showed the track went from Clifton (from a prominently displayed sign) to Cape Kidnappers. This meant that the Department's Asset Information System (AMIS) showed the length at 1.1km whereas the link on the map from the website showed 9.5km. Whenever the track was inspected under the Department's inspection process the information provided was from AMIS and therefore 1.1km.

The investigation team believes there are three broad areas that played a critical role in contributing to people being exposed to risk. These are below:

Promotion of Short Walks and Day Hikes Campaign in 2017

- During 2017 the Department promoted the Cape Kidnappers walk which coincided with an increase in visitor numbers including those who undertake the journey by tractor and trailer under a concession operated by Gannet Adventure Tours. (A concession is required because of the small part of the Black Reef Wildlife Reserve the tour drives through near the end of the track to the gannet colony, as can be seen in Appendix 1).
- In early 2017 using qualitative research and qualitative criteria under the Product Development Team, over 60 walks were identified that were to be tested and consulted with Operations. Cape Kidnappers was not on the original list.
- The project team then included Cape Kidnappers following discussion with RK and [REDACTED]. Increasing the length of the walk from 1.1km to the full 9.5km walk meant it now met the required criteria for a day hike.
- The walks were selected by applying customer-focused research which showed visitors select a walk based on time, location, scenery, accessibility, safety, difficulty and popularity. To achieve this GW provided an overview to Operational teams which included three specific task assignments:
 - Iwi Consultation DOC-3029049
 - Stakeholder Engagement DOC-3038552
 - Ground Truthing Data - DOC3038129
- Due to a combination of a slow response from LNI Operations for information requested by the Products Development Team and an impending visit by the Minister of Conservation which included the desire to make an announcement on the Cape Kidnappers day hike, consultation was limited to phone calls.
- RK describes the slow response being due to "operational push".
- The investigation team found no evidence of management agreements or other arrangements such

as MOUs, easements or PCBU plans between DOC and stakeholders (i.e. the Hastings District Council, the Hawkes Bay Regional Council, or the private landowner) in managing the walk either prior to it becoming a day hike, or during the day hike development process.

- There is some evidence of consultation over the promotion of short hikes. This appears to be limited to phone calls from [REDACTED] and include:
 - Gannet Adventure Tours, who responded “in some ways” to whether the walk should be considered
 - Cape Farm, who responded “yes”
 - Iwi, who responded “yes”
- There was little evidence of consultation on promotion of the day hike with the Hastings District Council, however they deferred to Tourism Hawkes Bay who advised that they were happy with the promotion and that no concerns around risk were discussed by either the Department or Tourism Hawkes Bay.
- Additionally, there is no evidence that risk was discussed with the Hastings District Council prior to or during the promotion.

Visitor Risk Management

This section explores the considerations given to risk during the development and promotion of the Short Walk and Day Hike process.

The predominant visitor group for this walk is Day Visitor. It is expected then that most of the people visiting would be “vulnerable visitors”. This means that most visitors on this walk would have a low tolerance to risk therefore the walk needs to be appropriate to their level of skill and experience.

The increase in the number of walkers has increased the potential for accident along the walk, simply due to increased time people are exposed to the risks of tide and rockfall.

Throughout the history of the area there have been indicators to suggest that the beach cliffs posed a significant risk. DOC systems and processes did not capture these adequately, because they were not on DOC land. However even after the Department began promoting the walk Departmental processes still did not capture the potential risks. This, with several warnings from [REDACTED] and others that if adequately followed up, may have resulted in either a geo tech report being undertaken and possible closure of the track. Indicators of risk prior to the incident include:

- Newspaper articles of past incidents in 1972 and 1988 (see Appendix 4)
- A series of emails (and a presentation) from July 2017 from [REDACTED] in his role of Visitor Risk Advisor, supported by his manager at the time Graeme Ayres, highlighted his concerns to management regarding visitor risk generally, including Cape Kidnappers specifically. The following is a brief summary of these emails and to which the investigation team believes there were not adequate organisational responses:
 - 12 July 2017 memo to [REDACTED] and cc [REDACTED] of the Product Development Team in which he advises that risk isn’t adequately addressed in the tourism walks projects and advises to address the risks. [REDACTED] emphasises the need to check the projects against the principles and the non-negotiables in the policy. [REDACTED] raises this with the team citing concerns over risk and requests site visits from Products Development Team to address this.
 - 7 September 2017: raises concerns over media advisory referencing Cape Kidnappers noting risks of sea cliff rockfall and tidal issues – also notes it crosses private land with no guarantee of permanent access. Sent to [REDACTED] project team member. [REDACTED] advises the investigation team that he raised the concerns with Products Development Team.
 - 12 October 2017: raises concerns to GA on risks regarding Cape Kidnappers. GA advises the investigation team that he supported [REDACTED] and asked him to continue to raise the

concerns with Product Development Team.

- 26 October 2017: GA requests an update on [REDACTED]'s progress on his work with the Product Development team, having cited media release planned for 27 October. GA notes that it is "still light on safety?"
- 27 October 2017: [REDACTED] responds in an email stating concerns of risk of rockfall at Cape Kidnappers after noting "at least 3 of the sites have significant natural risks capable of producing mass fatality".
- 1 February 2018: presents to Tourism Task Force, noting risk at Cape Kidnappers of seacliffs.
- 8 February 2018: raises risk issues via email to GA, GW and Harry Maher over promotion of Day Hikes and Short Walks in the Air New Zealand magazine citing CK, specifically noting "*the situation worries me. Do we have a good understanding of the visitor risk at site? Are they well managed? If so, are those risks tolerable?*" GA and Harry Maher advise that they see this accountability is with GW. GW was unable able to provide any further evidence that this was follow up. No further correspondence was cited by the investigation team.
- 14 February 2018: gives presentation to Internal Strategy and People Leadership Team, including concerns over Cape Kidnappers.
- In an email of 6 June 2018, [REDACTED] highlights concern that "*Some visitor risks may have been overlooked through the creation of new 'short walks' and 'day walks'.... Cape Kidnappers, Hawke's Bay, has people walk along the beach. This walk is very dependent on tides and also has unstable cliffs above.*"
- A key part of the of the task assignment around testing the inclusion of Short Walks and Day Hikes was to engage with district staff to confirm whether tracks identified through customer-focused criteria are walks that are suitable for marketing this product.
- Under the Day Walk criteria, based on customer qualitative research, safety is based on "*do visitors feel confident they can safely complete the walk? Is the track and structures to standard*". Both these statements while valid do not capture [REDACTED] concerns of visitor risk.
- At Cape Kidnappers the track services standard apply to only 1.1 km of the 9.5 km of track as this is the section that was administered by DOC.
- As [REDACTED] states in an email during the interview process, "*A specific question was not asked on visitor safety or if the track had a current visitor hazard management plan or issues.*" It was assumed that Operations would remove tracks from the list if there were any concerns. Rob Roy Track was removed from the list, but Cape Kidnappers was not.
- The process assumed that visitor risk was already an established component of the current walks and any anomalies or issues would be picked up by the accountable managers in Operations. Had the task assignment been more explicit with risk as a specific component, it may have picked up on concerns raised by [REDACTED] and others.
- The concerns raised by [REDACTED] in his assessment were managed locally in Napier by [REDACTED], who despite viewing [REDACTED] comments on risk made six weeks earlier on 6 September 2017, deferred any actions to the recently commissioned Cape Kidnappers Redevelopment Options Analysis and associated Opus Preliminary Geotechnical Report which discusses option for redevelopment of the DOC amenity and track area.
- Deferring to the Opus report to ensure risk of rockfall along the beach is covered is clearly an error as the Opus report only focuses on the "study area", i.e. the DOC 1.1km track and amenity area.
- Following discussions between the Product Development Team and [REDACTED] where the issue of rockfall risk is raised, [REDACTED] again requests [REDACTED] to review. [REDACTED] advises that he has asked Opus to include the Product Development Team's comments in the Opus report knowing that options for

redevelopment are underway.

- However, there is no evidence of any changes to the Opus report as a result of this and further correspondence indicates the issue has not been addressed. The Opus report explicitly excludes the beach walk.
- As a result of the risk assessment █████ recommended a team process take place between the Product Development team and the Napier office. █████ responded that because they didn't have all the information (i.e. Geotech report) it would be prudent to wait. Team process did not occur and was not followed up by either the Product Development or Operations teams.
- While █████ questioned her staff on the risk, and the Product Development Team also enquired, the issue of unaddressed risk should have been picked up by the accountable Operations Manager █████ and/or by the Product Development Team.
- The Department's Risk Policy states that there is "no tolerance¹ for placing the health or safety of people at risk, whether they are part of the Department or otherwise". It goes on to acknowledge that there are differences between the safety of people in the workplace and visitors choosing an activity on PCL. It does appear however that risks at Cape Kidnappers day hike were tolerated, not intentionally but erroneously, as noted in this report.
- There was evidence the timeline for gathering information on the walks did put pressure on the decisions made by the Product Development Team to get the high-profile Short Walk and Day Hikes project across the line. A timeline provides insights into specific examples:
 - On 1 September 2017 email went from the Product Development Team to RTH staff to visit the Day Hikes that were being promoted to make the team aware of potential risks and the need for "on ground truthing".
 - 5 September 2017 Product Development Team member undertook a site visit and highlighted the risks, including safety risk of tides and rock fall, stakeholder risk if landowners have not been consulted properly and the Minister's forthcoming announcement at Napier.
 - 6 September 2017 Product Development Team asks █████ to do a desktop exercise from Nelson. █████ notes the short timeframe for response, that visitor risk will increase as the walk is promoted, and there is an ongoing likelihood of risk to vulnerable visitors.
- █████ assessment in September 2017 is the first visitor risk assessment done for the entire track (previously one was completed in 2009 only for the DOC section of land). █████ assessment results in the rock fall hazard being assessed as unacceptable, and notes:
 - consider involving GNS Science to monitor the site and identify activity changes.
 - obtain a geological hazard assessment report for the site and carry out any mitigations required.
 - permanent on-site hazard warning signs could be considered particularly if recommended by the geotech report.
- █████ review of █████ assessment six weeks later, as requested by █████ results in the following response:
 - o reported past incidences or near misses in the last 20 years. This will happen but there have been no reports.
 - there have been significant land slips during the winter periods
 - there are nine (9) "danger unstable cliff" signs along the walkway listed in AMIS [investigation team note - these signs are at top of cliff, not along the beach, and warn walkers to keep away from edge]

¹ "no tolerance" is defined in the Policy as "it is not appropriate to take any level of risk beyond those routinely accepted as both unavoidable and reasonable"

- After a series of e-mails on 6 September 2017 between operations and the Project Team the decision was made to keep the day hike included. As noted by [REDACTED] "Decision was made to keep Cape Kidnappers on the Day Hike list given actions being undertaken to manage visitor hazards pre-launch".
- It is clear the Product Development team believed, erroneously, that Operations were managing the hazard of rockfall. Mitigating actions however were limited to signs, the DOC website and brochures.
- As a part of the task assignments from the Products Development project it was stipulated that the Operations Directors have the ability to ground truth and state whether or not they support the walk being included. GW acknowledges to the investigation team that risk was not explicit enough in these task assignments.
- Rockfall risk notifications were not held within AMIS which is the depository of any actions required for Operational teams. Effectively despite all noted concerns the DOC systems were not applied, which resulted in no further action on critical issues.
- The investigation team does note that AMIS was without an 'owner' for several years up to 2018, however relevant staff were trained in how to raise a notification in AMIS.
- DOCs visitor risk assessments and service standard assessments were only undertaken on 1.1km of a 9.5km Day Walk as this was the section of track owned and managed by DOC and registered in AMIS to reflect this. The potential risk was raised by [REDACTED] following her walk on 4 September 2017 as mentioned earlier.
- There have been three risk assessments undertaken prior to the incident and all have different outcomes. They are listed in the table below and shown in the risk matrix in Appendix 5 (due to variability of risk assessments, [REDACTED] Principal Advisor Visitor Risk and subject matter expert, was asked to provide an opinion of risk. These are not formal assessments).

Who/When/Site	Consequence	Likelihood	Vulnerable Visitor	Evaluation	Best Practice
[REDACTED] 21.10.09. PCL	Medium	5-40 years	N/A	Unacceptable - management actions	Signage at the start and Brochure information warning of risk
[REDACTED] 6.09.17 PCL and beach (whole walk)	Medium	Between 1 & 5 years	N/A	Unacceptable - management actions	Obtain Geological hazard report Signage and Brochures
[REDACTED] 08.08.18 PCL	Medium	40 years +	No	Tolerable (Acceptable in old system)	Maintain
[REDACTED] opinion on risk:					
[REDACTED] 11.02.19 PCL	Very High	40 + Years	Yes	Intolerable (management required) Unacceptable	Obtain Geological hazard report
[REDACTED] 11.02.19 PCL and beach (whole walk)	Extreme	5-40 Years	Extreme	Intolerable (seek advice) Unacceptable	Seek specialist advice i.e. [REDACTED] for future actions.

- There are likely several reasons there is difference in risk assessments including:
 - knowledge of the environment and past incidents
 - different perspective on risk
 - uncertainty over the location they were assessing and
 - background and experience of individuals in doing risk assessments.
- While all assessments have been done differently the key points of the assessments are:
 - If the Department is promoting the whole track an assessment should cover the whole

track and therefore be included in the Product Development Team's considerations

- o A geo technical report should have been carried out on the whole site, after [REDACTED] assessment. There was no follow up however after that assessment.
- [REDACTED] notes in his assessment on 8 February 2019 that if people undertaking previous assessments had all the information on past incidents and indicators, as well as awareness of the whole of the walk it would likely have generated an intolerable outcome, therefore, to seek specialist advice. While there is the benefit of hindsight this would have meant a geotech assessment would not likely have been suitable for this situation, and in fact a full quantitative risk assessment would be needed. This may have meant Cape Kidnappers being dropped from the list without an assessment taking place.
- The most recent risk assessment undertaken prior to the incident was carried out on 8 August 2018 by [REDACTED]. The accountable Operations Manager [REDACTED] was not consulted in the final sign-off of the risk assessment. [REDACTED] assessment was significantly different to the [REDACTED] assessment in 2017. [REDACTED] signed off the work order on behalf of the Operations Manager within AMIS, but he mentioned to the investigation team that he was unaware of the signoff process. This represents a risk to the accountable Operations Manager.
- Bruce Parkes (BP) is accountable for the Visitor Risk Management Policy which includes roles and responsibilities for the DDG:
 - o Accountable for the coordination and strategy of visitor risk management within the Department.
 - o Promotes compliance with the Visitor Risk Management Policy and Managing risks to visitors on public conservation land Standard Operating Procedure and Guideline.
- BP acknowledged to the investigation team that he did not have "felt accountability" at the time (2017). The investigation team notes the considerable work done over the last 12 months to review and restructure into the new Policy and Visitors unit including an improved structure around visitor risk. The Department should have confidence around this.
- RK was accountable for signing off the inclusion of the Cape Kidnappers day hike. He acknowledges the lateness in signing this off, due to "operational push". The investigation team notes the workloads and pressure on Operational Directors and Operational Managers have been highlighted by RK in the past as it has been in other incident reports.
- [REDACTED] at the time of the [REDACTED] 2017 risk assessment, was accountable for risk in Napier District and acknowledges relying on her staff to manage the issues raised by [REDACTED] risk assessment. She could not recollect whether she signed off the 2018 risk assessment but assumes this may not have occurred in the correct manner. [REDACTED] was acting in the role at the time of the [REDACTED] assessment in 2018. [REDACTED] had left the process to [REDACTED] and couldn't recall the outcome as [REDACTED] had returned.
- [REDACTED] did state that she walked the track twice after discussion with the Product Development Team so she could get greater awareness of the area. This gave her confidence to include it as a day hike (i.e. she felt the risk of backlash from the Caravan Park and Farm are low, and the cliff erosion in the amenity area (on the DOC land) is high but not immediate).
- Operations staff believed that inclusion on day hikes was a forgone conclusion and any feedback they provided would not have made a difference.
- The DOC website and brochure on the Cape Kidnappers short hike focussed primarily on the tide. The website states under Track Overview:
 - o 19 km return return via same track
 - o Walking and tramping - 5 hr return, Easy: Walking track
 - o Seasonal restrictions - This walk is along a beach and can only be attempted during low tide. Don't get caught out by the tide - check the tide timetable and leave yourself enough time to return safely.
- It is not until further down the website there is a statement under Hazards:
 - o This walk is along a beach and can only be attempted during low tide. Ensure you

check the Cape Kidnappers tide timetable and leave yourself enough time to return safely. It's best to:

- departing from Clifton to the Cape: leave at least 3 hours after high tide
- returning from the Cape to Clifton: leave the cape no later than 1 hour 30 minutes after low tide.

Occasionally, high tides and big seas block access along the beach.

The cliffs along the beach are unstable and slips can occur - do not attempt to climb these, and rest or picnic away from the cliffs.

- One sign by NZ Police and DOC (Appendix 6), past the campground and at start of beach clearly show warnings for the tide, but no reference to rockfall.
- Another sign by Hastings District Council and DOC (Appendix 7) in Clifton once again shows tidal warnings but does reference rockfall.
- Neither of these signs address rockfall effectively.
- There is no requirement for landowners to report rockfall to the Department. The concessionaire, under his agreement with the Hawkes Bay Regional Council to manage slips, is required to report slips to the Council where he needs to use machinery to remove debris. This is rare, perhaps once a year.
- Of note, the investigation team believes there was a smaller rockfall the day before (22 January) that was not reported to DOC. ██████ advises that if they had known this they would not have undertaken the walk as they were also considering another option near Napier.

Land Ownership and Management

- The walk covers several land tenures (shown in Appendix 1), i.e.:
 - the beach section (where the rockfalls have occurred) from the Clifton start following unformed public road administered by Hastings District Council,
 - sections of private land,
 - Public Conservation Land. The Hawkes Bay Conservancy Management Strategy, Volume 1, 1994-2004, Appendix 1 states that “The only areas managed by the Department are at the two reserve areas (at the Cape and at the end of Black Reef) which total 12.9094 hectares. The area has a dual classification, with the gannet colonies classified Nature Reserve, and the public facilities areas classified Government Purpose Reserve”
- The tenure of the land and associated management of this was not clearly articulated during this process. While maps and boundaries exist, the information is not always accurate and conflicts (e.g. foreshore vs council vs private ownership). It is clear there were no agreements or arrangements in place to manage the land, including risk. Main points:
 - uncertainty over what is the Cape Kidnapper walk.
 - third party ownership and management not referenced in AMIS and there is no associated documentation on any agreement between third parties.
 - whenever Cape Kidnappers hike was discussed there was confusion around how the track was been managed in its entirety
 - the walk crosses private land
- This added confusion to what was being discussed, what risk was being assessed and who was accountable.

The Cape Kidnappers Great Day Hike Development Indicative Business Case signed off by ██████ on 23 January 2019, but currently on hold, identifies a section on hazards that includes rockfall. The

author of this document advises the investigation team that this relates to the DOC part of the walk only, but the RTH team believes this includes all of the walk. This highlights the confusion over what section of the walk is being discussed whenever the subject of the day hike is raised.

While outside of the scope of this investigation, there appears that there is a disconnect between systems and further work is required. For example, the AMIS visitor risk system is not linked with website information. Furthermore AMIS data and GIS data, while linked, show that the information between the two systems do not always correlate, and that visitor risk was not effectively integrated into the Product Development Process. The investigation team believes that these examples point to the fact that further work on identifying potential areas of disconnect is required, and that when completed will ultimately ensure a more robust visitor risk system.

Also outside of the scope of this investigation, and after interviewing ██████████ who run the Gannett Adventure Tours concession, it was noted that the relationship between the concessionaire and the Department is unsatisfactory. ██████████ advise they were not consulted on the day hike proposal and were disappointed to find out through other means. There is however evidence of limited consultation via a phone call from ██████████. ██████████ and ██████████ do agree there was discussion at length after the announcement. While ██████████ and ██████████ concerns were largely around promoting the walk, they were also concerned, they say, at increased exposure to risk by walkers. Nevertheless, the relationship needs improved and it is noted the focus the current Operations Manager ██████████ is putting on this.

9. CONTRIBUTORY FACTORS (ICAM)

Absent/Failed Defences

Warning signs, including website and brochures, were inadequate to warn visitors of risk of rockfall

Individual / team actions

LNI Region were slow to react to the task assignment provided by the Product Development Team which resulted in minimal consultation and information being provided. RK signed off the inclusion of Cape Kidnappers as a day hike.

██████████ was the only person prior to the incident who undertook a risk assessment of the full walk and this resulted in 'unacceptable' risk and recommendation of a Geotech report. Napier staff deferred to the Opus report which recommended a geotech report, but this was only for the DOC PCL. Napier staff ██████████ carried out an assessment nearly 12 months after this but focussed only the DOC estate, not addressing ██████████ concerns on risks, changing the risk to 'tolerable', effectively removing the need for a geo tech assessment.

The risk assessment carried out on 8 August 2018 by Napier resulted in the Operations Manager not being consulted and therefore unaware of the assessment details.

Promotion of a day hike that is largely not on PCL placed the Department in the position of needing to ensure that all risks are appropriately managed, irrespective of tenure of land. This did not occur in any meaningful way.

The Product Development Team assumed that all tracks had been managed by operations to date and risk was a part of that management.

There was ongoing confusion by staff at various levels on what section of the walk was being discussed. This confusion remained even during the investigation process where some staff were not clear on what was being discussed.

There were a number of opportunities to address risk in the 12 months prior to the incident that were raised by DOC staff, but these were not followed up.

Task / environmental conditions

The cliffs have a history of instability.

There was misconception of visitor risk by some of those involved, particularly at the operational level.

System / human interface, i.e. staff not entering notifications into the existing AMIS system

There was confusion on what part of the walk that was being assessed for visitor risk.

Organisational factors
There are no agreements or other arrangements in place with other parties (particularly the Hastings District Council and the private landowner), over management of the walk and associated risk.
The Department’s visitor risk management system failed by not reflecting the full walk being promoted by the Department and not recognising the visitor risk that Cape Kidnappers presented despite a number of prompts.
The promotion of the day hike increased exposure to visitor risk (i.e. tide and rockfall) due to increase visitor numbers and increased exposure time.
The Product Development Team placed focus on iwi and community consultation and ground truthing, but visitor risk was not explicit in this process. While ground truthing did include safety, it was not explicit enough to address the requirements of the Visitor Risk Management SOP.
There was no evidence of meaningful consultation with the Hastings District Council, or other parties, on visitor risk.
Team process, recommended by [REDACTED] did not occur as a result of the visitor risk assessment process undertaken by [REDACTED] and reviewed by [REDACTED].
“Operational push” was a factor in the slowness of the LNI response to the task assignments

10. CONCLUSION

While natural events are mostly not preventable, and visitors do need to accept a level of responsibility for risk in the natural environment, the incident did highlight significant failures at various levels (both human and system), any of which, if recognised at the time, could have prevented visitors being exposed to what is significant risk of rockfall. While most unfortunate for the two injured tourists, it is very fortunate others nearby were not caught in the rockfall. There is a high probability that people would not have been exposed to this risk along the beach:

1. if the Department had been more aware of the implications of promoting an area that was mostly not on DOC land.
2. if the Department’s visitor risk management policy was more explicit in how visitor risks are to be managed, particularly on land the Department promotes but is not the landowner.
3. if tasks assignments by the Recreation, Tourism and Heritage unit were more explicit in addressing visitor risk.
4. if a checking or verification process had been in place by that unit to ensure visitor risks were adequately addressed.
5. if the Operations team had been more diligent in assessing visitor risk, including awareness of what exactly was being assessed.
6. if the Operations team had not effectively dismissed an earlier assessment and enquired more into a staff member’s updated assessment.
7. if the Operations team had undertaken a full consultative process over the whole walk with interested stakeholders.
8. if there had been no confusion over the area being assessed. If there wasn’t then it is likely this area would not have been open to the public until either a full Geotech assessment and/ or a full quantitative assessment had been undertaken.
9. if the many warnings, including those by [REDACTED] and [REDACTED] had been properly responded to, or if internal systems were used to record those concerns.
10. if some staff hadn’t felt pressure to get the hike “over the line”.

Quality control over the entire national visitor risk management (risk assessment) process needs to be established. For consistency visitor risk assessments should be carried out by a trained team and

specialists commissioned where required.

Lack of risk awareness and skill in visitor risk assessment were observed during the investigation and there needs to be a greater awareness of visitor risk requirements across all staff in the Department and an understanding of how to engage with stakeholders.

Clear reporting process needs to be established in AMIS to ensure all department staff can report visitor risk in a single depository. This will enable the accountable manager at site to be made aware of the visitor risk and therefore actions being carried out.

Effective consultation needs to take place with interested parties, particularly if land is not DOC. This includes formal agreements if necessary, and agreement on visitor risk management.

The investigation team notes that Steve Taylor, Director of Heritage and Visitors is working with the team to support operations and provide advice on visitor risk going forward. [REDACTED] is supporting this and has been on site giving specific visitor risk advice to the Operations Director RK and [REDACTED].

The link below is site visit notes provided to RK from [REDACTED] which gives an update on the current situation at the site.



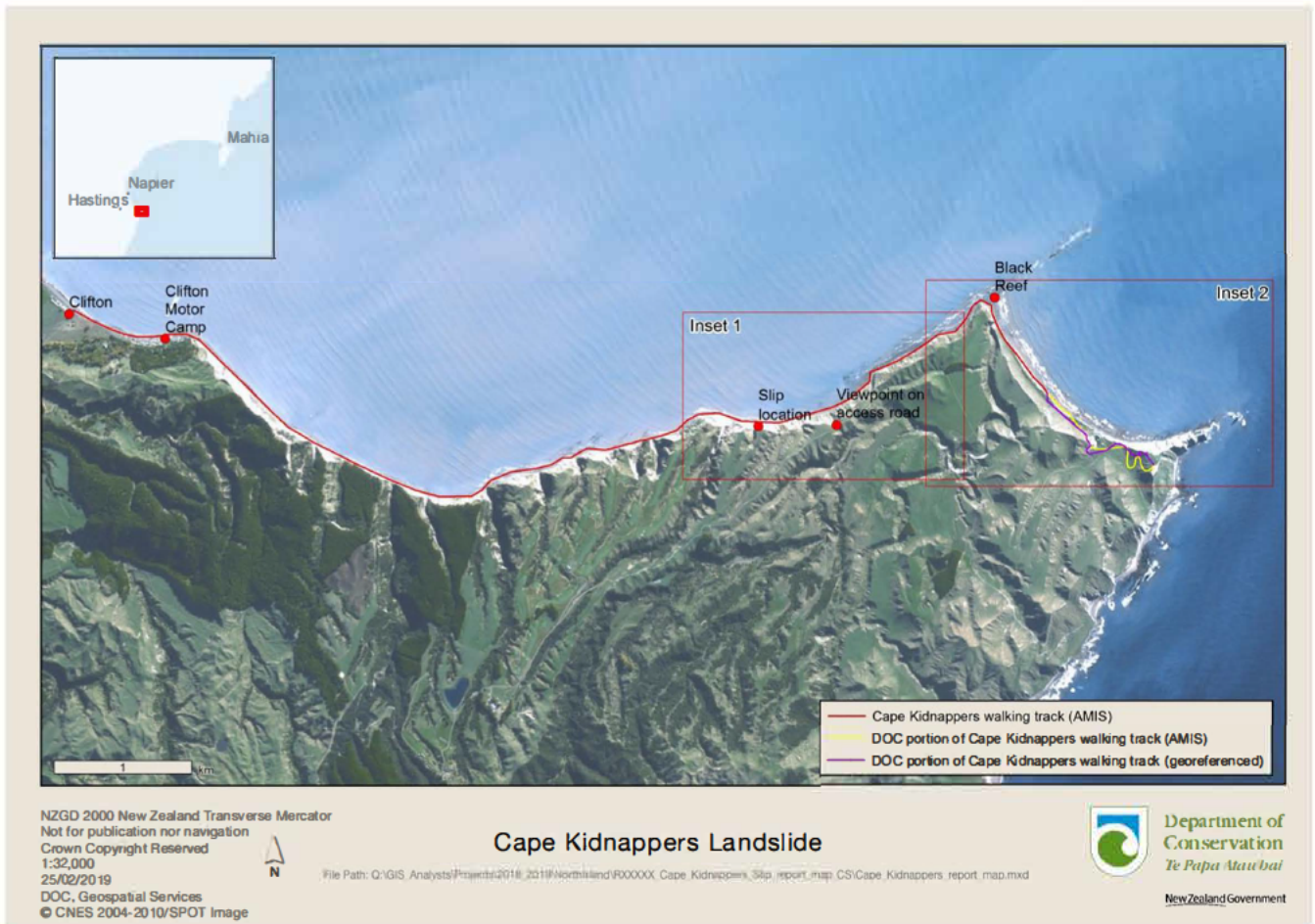
Cape Kidnappers
Site visit 8 Feb 2019

RECOMMENDATIONS				
	Recommendations	Person Responsible	Status	Due Date
1	Confirm future management of Cape Kidnappers track and whether the track is to be re-opened or remain closed.	Reg Kemper	The result of the Qualitative Risk Analysis (QRA) is scheduled for completion 13 September 2019. The decision will be made three weeks after the QRA has been reviewed.	QRA 13 Sep 2019 Decision early Oct 2019
2	Ensure all Operations Managers are aware of accountabilities around visitor risk and provide clarity on the associated sign off within the visitor risk management system.	Mike Slater	This recommendation will be completed in conjunction with the Heritage and Visitors Unit. Accountability for the AMIS system will be included in the associated sign off.	31 July 2019
3	Confirm land status and create agreements or understandings with landowners over the entire Day Hike, confirming responsibilities and accountabilities.	[REDACTED]	Work is underway on the relationship agreement with HDC and they have received a draft Qualitative Risk Analysis (QRA) proposal from Stantec. The relationship agreement will describe responsibilities and accountabilities for landowners across entire day walk.	30 June 2019
4	As part of any agreement with landowners, or separate to this if there are no agreements, a reporting process is in place, so the Department is better informed of rock fall.	[REDACTED]	The relationship agreement (in progress, see above) will describe any reporting process and expectation particularly around rockfall to ensure the department is well informed.	30 June 2019
5	Review quality control processes to ensure visitor risk assessments are accurate and completed to a high standard.	Steve Taylor	The review of quality control processes, which includes a quality assurance programme of completed visitor risk assessments, will be complete by the due date. The outcome of the review will determine actions and timeframes.	30 June 2019

RECOMMENDATIONS				
	Recommendations	Person Responsible	Status	Due Date
6	Review visitor risk assessment training to ensure the Department has capability and capacity to undertake robust risk assessments.	Steve Taylor	All project works officers in the Operations Planning team have attended sessions on risk management, which includes the need for visitor risk assessments as an integral part of projects. A quality assurance programme is in progress across all aspects training, including supporting documentation and the use of AMIS as a tool. Work is in progress to ensure that there is a business owner for Visitor Risk Management in AMIS.	30 June 2019
7	Develop processes that ensures consistency between signage, brochure information, website information, AMIS and GIS information and that accountabilities for each of these are clear.	Steve Taylor	This is part of the wider visitor safety system work and will require investment from several areas including CEU, Operations Planning and Heritage and Visitors. Timeframes are dependent upon the approval of a work programme by the DDG Policy and Visitors and will be driven from a review of the Visitor Information SOP.	June 2020
8	Ensure that the length of track in GIS is the same that is in AMIS to ensure management of the facility reflects what is on the ground.	Darryl Lew	Operations Planning has been working with the Heritage and Visitor Unit to scope the work required to appropriately action the recommendation. Asset Planners will be required to update both systems for every length of track nationally. New products, icons and gateways will be prioritised first and completed within a month, followed by local treasures and back country tracks, to be completed within three months. Team process will be conducted to ensure clarity of the task and to ensure that the timelines are achievable within the context of ensuring quality outputs.	31 August 2019
9	Ensure that AMIS is able to reflect notifications of information that is provided to an accountable person on specific visitor risks.	Steve Taylor	The recent establishment of the Asset Management Team within Operations Planning will also increase capacity and capability for system analysis and implementation. Reporting requirements for the DDG Visitor Safety Taskforce (Visitor Safety System Oversight Group) will be established but the use of AMIS needs to be mandatory to ensure consistency of reporting.	30 October 2019
10	Review AMIS visitor risk system to ensure transparency of the actions required by Operations Manager. Suggest a reports/ dashboard on current risks, similar to the system used for High Risk Structures.	Steve Taylor	Subject to the ability of the IT system and IT department to do the dashboards, and dependent upon budget required for IT work.	30 October 2019
11	Review the Department's internal systems and processes that in this case resulted in risk not been explicit in the	Steve Taylor	A new structure to manage recreation planning, visitor safety and heritage work has been established from 14 January 2019, which includes a Principal Advisor Visitor risk position and a	June 30 2019

RECOMMENDATIONS				
	Recommendations	Person Responsible	Status	Due Date
	short walk / day hike promotion so that clarity is provided around the process and accountability is clear.		number of Visitor Risk Assessment roles. More robust project management and governance will be a core part of ensuring clarity of process and accountability. Note: The due date is subject to approval to fill vacancies in the proposed new structure.	
12	Undertake audit of a selection of current visitor risk assessments, with a focus on current known areas of risk.	Steve Taylor	Heritage and Visitors has conducted a first-round quality assessment of all the Short Walk Day Hikes sites and is reviewing the initial hazard assessments. Ongoing QA is continuing, including a review of the visitor safety system accountabilities. Any identified risks will be subject to increased management actions. The review will most likely identify further quality improvements.	End of Sept 2019
13	Undertake team process to review all tracks that are on multiple tenures and ensure clear lines of management and ownership have been established	Darryl Lew	This will be reviewed in conjunction with recommendation 8, with the objective to use the AMIS system to manage the information. Timeframes will be dependent upon whether this is a large scale change, which may require a project team outside the current staffing capacity. There will also be links into the visitor systems work. If a large scale change is required then the due date might need to be revised to December 2020.	28 February 2020
14	Develop a system and process that integrates or links Departmental data bases and programmes of work that ensure critical information is not lost between systems, including AMIS, Web sites, GIS, Marketing, and any appropriate linked system that is not integrated.	Steve Taylor	Without extensive investment in our IT systems, we will need to ensure that the visitor safety system interacts at a system level and that SPA is clear across all components and sub-components of the process. The date is dependent upon the DDG Policy and Visitors approving a substantial programme of work.	End of December 2019

12. SIGNATURES OF INVESTIGATION TEAM		
Name: _____	Signature: _____	Date: <u>15/05/2019</u>
Name: _____	Signature: _____	Date: <u>15/05/2019</u>





NZGD 2000 New Zealand Transverse Mercator
 Not for publication nor navigation
 Crown Copyright Reserved
 1:7,500
 25/02/2019
 DOC, Geospatial Services
 Sourced from the LINZ Data Service and licensed for re-use under the Creative Commons Attribution 3.0 New Zealand licence

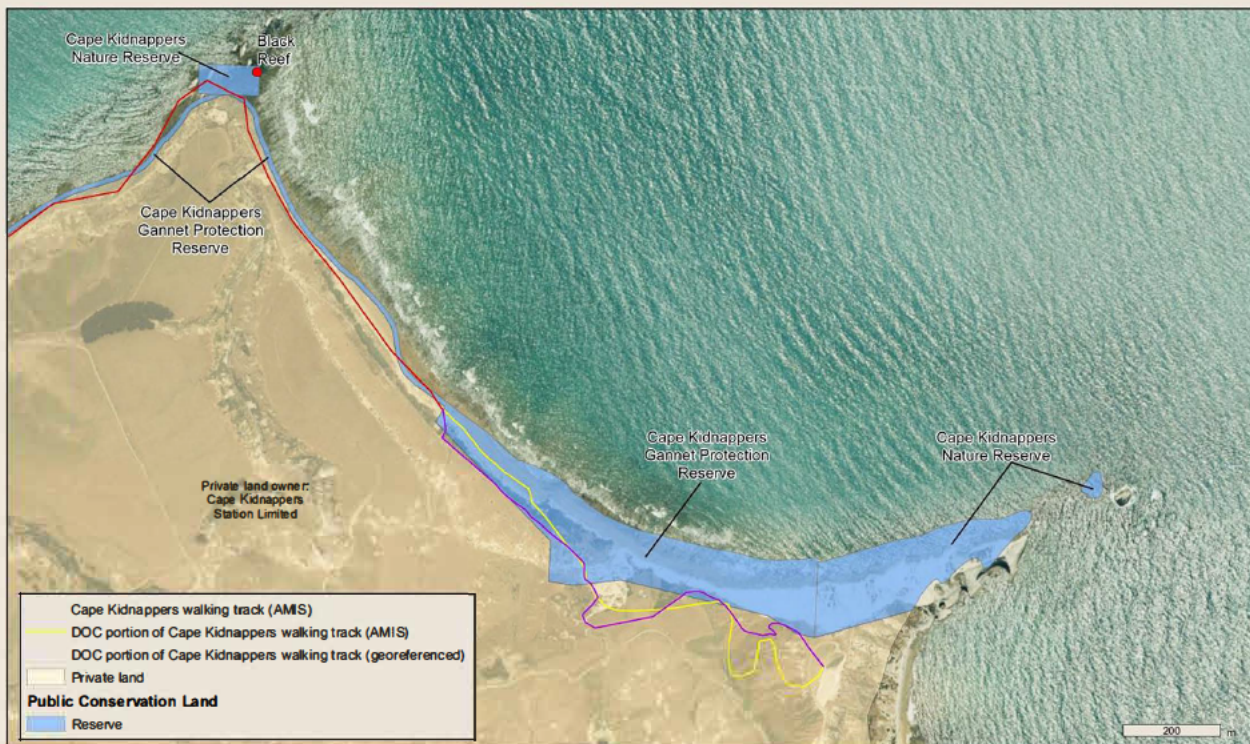
Cape Kidnappers Landslide Inset 1

File Path: O:\GIS_Analysts\Projects\2018_2019\NorthIsland\R000000\Cape_Kidnappers_Slip_report_map_CS\Cape_Kidnappers_report_map_inset_1.mxd



Department of Conservation
 Te Papa Atawhai

New Zealand Government



NZGD 2000 New Zealand Transverse Mercator
 Not for publication nor navigation
 Crown Copyright Reserved
 1:9,000
 25/02/2019
 DOC, Geospatial Services
 Sourced from the LINZ Data Service and licensed for re-use under the Creative Commons Attribution 3.0 New Zealand licence

Cape Kidnappers Landslide Inset 2

File Path: O:\GIS_Analysts\Projects\2018_2019\NorthIsland\R000000\Cape_Kidnappers_Slip_report_map_CS\Cape_Kidnappers_report_map_inset_2.mxd

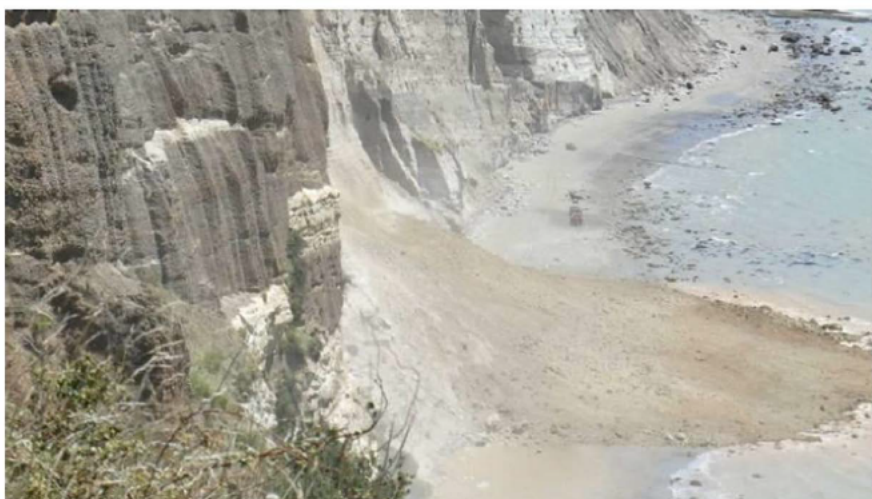


Department of Conservation
 Te Papa Atawhai

New Zealand Government



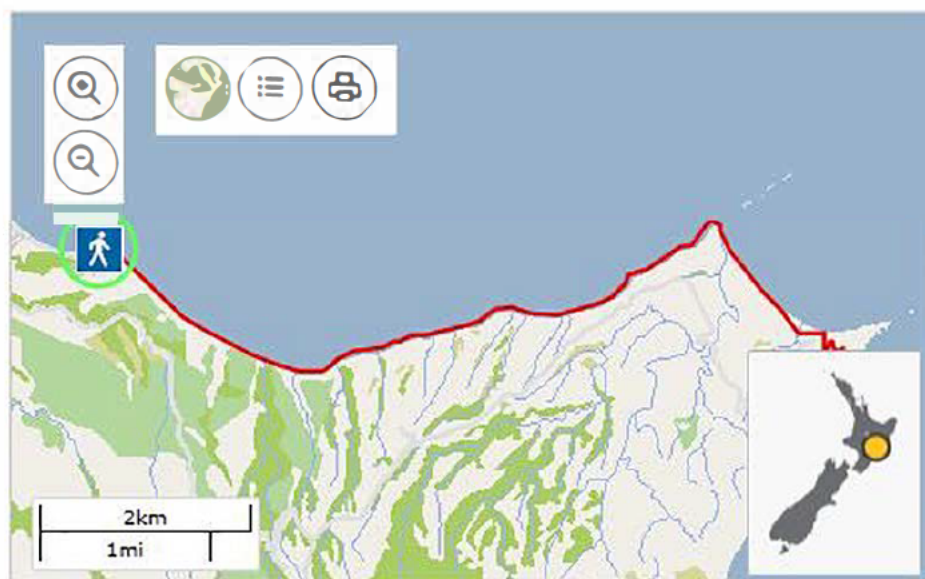
Actual rockfall on 23 January 2019. The two visitors were pushed out to sea to the right. The Gannet Adventure Tours tractor and trailer can be seen just clear of the rockfall.



Rockfall photo taken on same day of accident after dust had cleared.



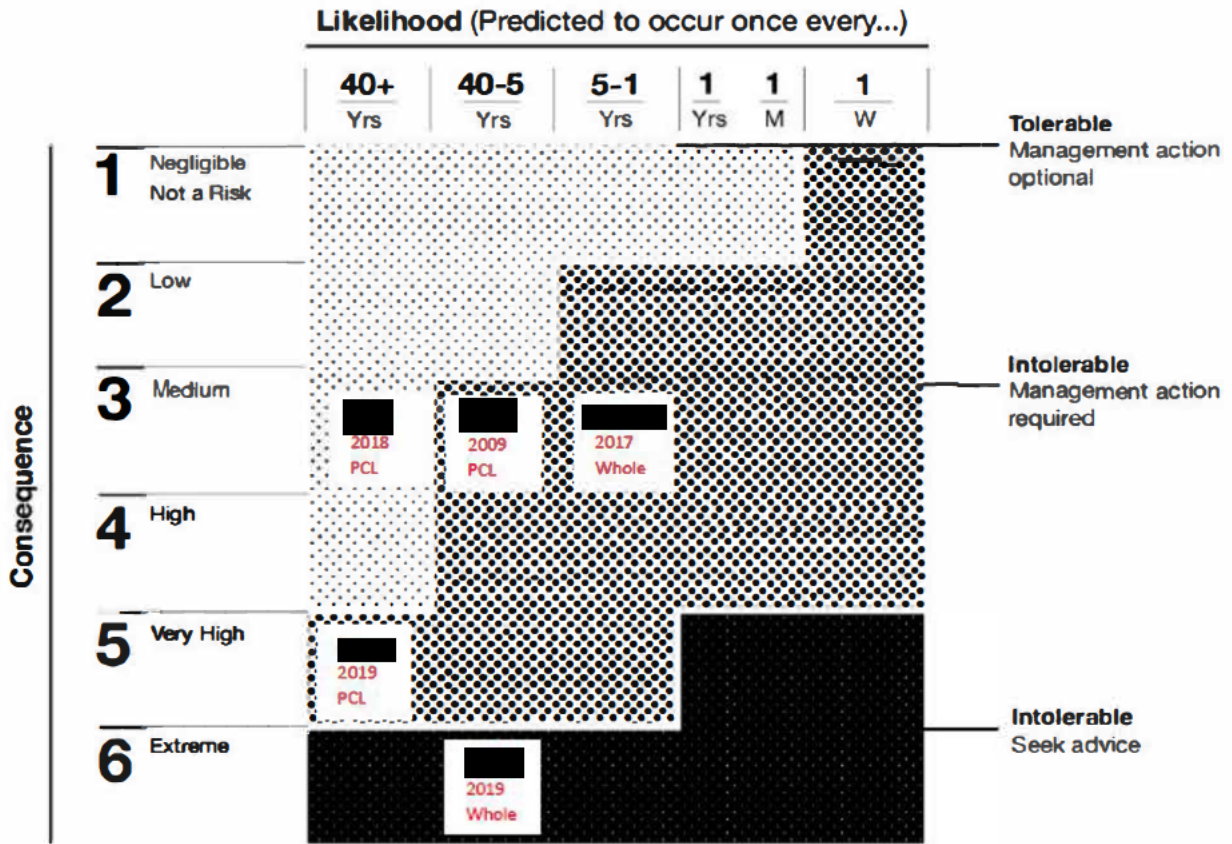
The incident scene



Map from DOC website



Newspaper clippings showing past events - 1972 and 1988



Visitor risk matrix for day visitors showing the three risks assessments undertaken prior to the incident and two post incident (PCL DOC 1.5km walk only, Whole full 9.5km walk)



NZ Police and DOC sign



District Council and DOC signs showing warnings (closure sign placed after incident)

