SOP

Visitor Safety Management SOP

Contents

Department of Conservation
Te Papa Atawhai

Te Kāwanatanga o Aotearoa
New Zealand Government

1. What you need to know

1.1. When you need to use this Standard Operating Procedure (SOP)

You must use this SOP when:

- Managing visitor safety at visitor sites on public conservation lands and waters (PCLW).

Where this SOP fits:

- Below the Visitor Safety Management Policy (docDM-1562377).
- Above the Hazard Management Guideline for Visitor Sites (doc-7462131).

What is included in this SOP:

- Managing risk to visitors from natural hazards, activity hazards and behavioural hazards at visitor sites on PCLW.

What is excluded from this SOP:

- PCLW not part of a visitor site.
- Visitor asset management.
- Hazards not affecting visitor sites.
- Inherently risky activities managed by visitors for themselves (e.g. climbing, hang gliding, base jumping, remote hunting etc).
- Concession activities and infrastructure, such as ski area equipment and buildings.
- Workplaces, work related assets (when not also used by the public for recreation), and hazards generated by work, including volunteer work.

Note: Operations Managers and Directors have authority to extend the scope of this SOP if there are compelling visitor safety reasons to do so.

Contact the visitor safety team for advice if you are considering using this SOP outside of the scope described above.

1.2. Who is accountable for this procedure

All staff managing visitor sites:

- Must know and apply the visitor safety management responsibilities and thresholds.
- Must assess and manage identified hazards according to this SOP and escalate issues to Managers when needed.
- Should understand that both DOC and visitors share responsibility for visitor safety management.

Regional Operations Managers and Supervisors:

- Ensure visitor safety is managed appropriately for the type of visitor site.
- Ensure staff know and apply the visitor safety management responsibilities and thresholds.
- Support and guide staff to follow this SOP and related policies.

Regional Operations Directors:

- Ensure visitor safety is managed appropriately in their region.
- Ensure management staff know and apply the visitor safety management responsibilities and thresholds.
- Promote compliance with this SOP and related policies.

Director, Heritage & Visitors:

- Oversees the implementation and maintenance of visitor safety management practices, including documentation, training, testing, monitoring, and reviewing.

Deputy Director-General Biodiversity, Heritage and Visitors:

- Coordinates DOC's approach to visitor safety management at a strategic level.
- Promotes compliance with this SOP and related policies across DOC.

1.3. What you also need to be aware of

Managers can approve changes to the SOP requirements and are responsible for those decisions. They should use their professional judgement, seek advice, or escalate if unsure. All decisions must be documented. Variations should be rare, and legal and health and safety requirements must always be followed. Common sense should guide actions in exceptional or emergency situations.

1.4. Glossary

Term	Definition
Visitor Safety Management	The process of reducing and maintaining risk to an acceptable level – so far as is reasonably practicable – for the type of visitor site.
Site Control Plan Process	DOC's process for identifying hazards, assessing risks, and applying controls at visitor sites.
Site Control Plan (SCP)	A plan detailing the work required to manage hazards at a visitor site.
GNS Natural Hazard Risk Analysis Methodology	A method for in-depth analysis of natural hazards like landslides and rockfalls. Used to quantify the amount of risk. Refer to section 5.
Hancox Methodology for Geological Risk Assessment at Huts and Campsites	A screening tool to assess the suitability of sites for huts or campsites. Refer to section 5.4.
Hazard	A source or situation that can potentially cause harm or loss to visitors.
Risk	The likelihood and consequences of a hazard to visitors.
Qualitative Risk Assessment (within the context of this SOP)	In-house risk assessment using the Site Control Plan risk matrices. It is a social process, drawing from the knowledge of the assessment team and any incident records that are available.
Quantitative Risk Assessment (within the context of this SOP)	Expert analysis to quantify risk, used for detailed natural hazard assessments.
Hazard Management	Techniques to reduce risk from hazards.
Acceptable Risk Level	DOC’s risk threshold for the visitor site being managed. Monitor and maintain assurance that risk does not exceed this level.
Risk Threshold	The limit beyond which risk is treated differently. The visitor risk thresholds for different types of visitor sites are set out in this SOP.
Risk Tolerance	A visitor’s willingness to bear risk which informs their recreational activity preferences on PCLW.
Visitor Site	A location on PCLW with the following attributes: • Non-commercial visitor infrastructure is provided by DOC or an authorised third party. Or: • Non-commercial visitor infrastructure is provided by DOC or an authorised third party to access it, and/or it is part of the visitor experience being offered.
Visitor Infrastructure	Facilities, tracks or structures for visitor use.

2. Getting started

2.1. How this works and where it fits

How does this fit into the Visitor Safety System?

This SOP focuses on the Visitor Site Safety Management sub-system within DOC's Visitor Safety System.

Sub-system	Owner (DDG)
Visitor Site Safety Management	**Biodiversity, Heritage and Visitors**
Visitor Asset Management	Organisation Support
Visitor Safety Communications	Public Affairs
Visitor Safety Incidents	Biodiversity, Heritage and Visitors
Tourism Concessions	Strategy and Policy

DOC implements its visitor site safety management responsibilities from the visitor safety management policy using two processes.

2.2. Site Control Plans

Site Control Plans are DOC's process for identifying, assessing and managing hazards at visitor sites. They ensure a consistent approach to visitor safety management across all visitor sites.

Site Control Plans use local staff knowledge via a social process to identify hazards, assess risk and select appropriate management actions based on the Hazard Management Guideline for Visitor Sites. Site Control Plans are approved by Operations Managers and delivered by Regional Operations.

Once created, Site Control Plans are reviewed every four years or when review triggers are met.

See the Site Control Plan Intranet page for more information.

2.3. The GNS Natural Hazard Risk Analysis Methodology

This methodology (developed by GNS Science for DOC) is used when an in-depth, expert analysis of natural hazard risk (usually for landslide and rockfall hazards) is required to quantify the amount of risk posed by a natural hazard.

The GNS Natural Hazard Risk Analysis Methodology is covered in section 5.

Site Control Plans and the GNS Natural Hazard Risk Analysis Methodology enable DOC to manage visitor sites to acceptable risk levels. For support, contact the visitor safety team.

3. How to determine acceptable risk thresholds for visitor sites

3.1. Acceptable risk thresholds

Outdoor activities always involve some risk. DOC does not try to eliminate all risk, as making sites completely safe would not be reasonably practicable, would damage natural and cultural values, and limit visitor freedom. Instead, DOC manages risk to an acceptable level for the site's intended use against set risk thresholds. Hazards are only managed if the risk from them exceeds the acceptable level for the site type.

Easier sites for less skilled visitors have more safety features like bridges and barriers, while more challenging sites for experienced visitors have fewer safety measures and higher risk. Visitors should choose activities that match their skill level and risk tolerance. They are responsible for their risk tolerance decisions.

Where inexperienced visitor use is resulting in incidents at visitor sites for advanced skilled visitors with inherent challenges and hazards, DOC provides additional information to help visitors make informed decisions and decide whether the site is suitable for them. However, we do not usually change the track classification or add safety infrastructure that doesn't match the natural environment and intended use of the site.

There are three acceptable risk thresholds for visitor sites on PCLW. These apply to all types of visitor risk assessment. The thresholds correspond to the type of visitor site and its intended use. The concept is shown in the figure below.

Use the table below to identify the acceptable risk threshold for the site you are managing. If you cannot identify the right threshold, run a social process to identify the appropriate level. Contact the visitor safety team if you need support.

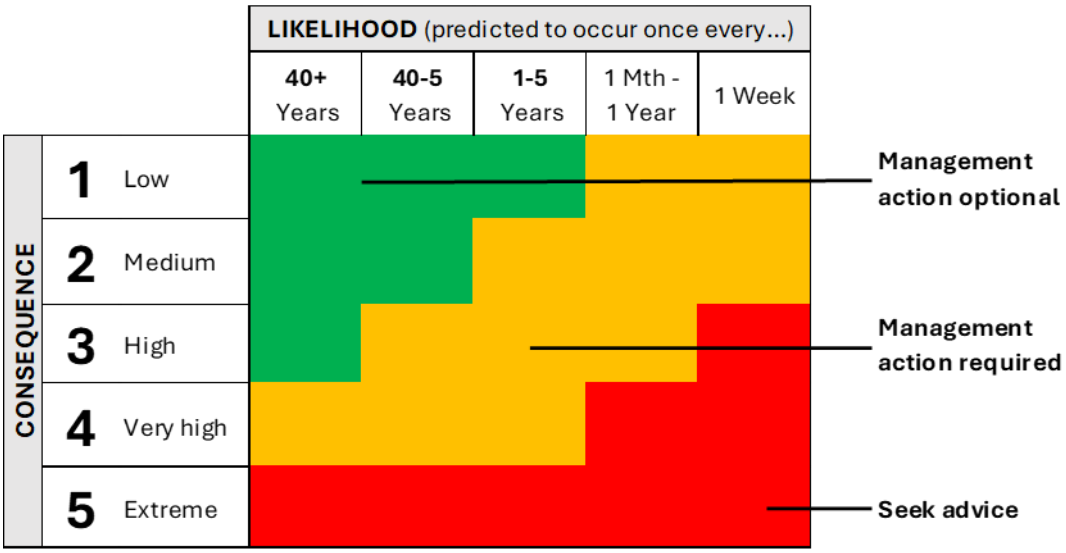
Type of visitor site	Visitor skill level required	Visitor safety infrastructure provision	Acceptable risk threshold
• **Short Walks** • **Walking Tracks** • **Grade 1 and 2 Cycle Trails** • **Campsites** • **Amenity Areas**	Limited skill	Highest level of safety infrastructure. Requirements for bridges and barriers on walking tracks are set out in the Tracks and Outdoor Visitor Structures Handbook (SNZ HB 8630:2004)	**Lower risk** Use the lower risk threshold matrix for Site Control Plans Use the lower risk threshold for the GNS methodology
• **Easy Tramping Tracks, including Great Walks** • **Grade 3 and 4 Cycle Trails** • **Promoted marine sites like Goat Island**	Intermediate skill	Moderate level of safety infrastructure Requirements for bridges and barriers on walking tracks are set out in the Tracks and Outdoor Visitor Structures Handbook (SNZ HB 8630:2004)	**Medium risk** Use the medium risk threshold matrix for Site Control Plans Use the medium risk threshold for the GNS methodology
• **Tramping Tracks** • **Routes** • **Grade 5 and 6 Cycle Trails**	Advanced skill	Lowest level of safety infrastructure Requirements for bridges and barriers on walking tracks are set out in the Tracks and Outdoor Visitor Structures Handbook (SNZ HB 8630:2004)	**Higher risk** Use the higher risk threshold matrix for Site Control Plans Use the higher risk threshold for the GNS methodology
• **Other PCLW** (not a visitor site)	• DOC's visitor safety management applies only within managed visitor sites. Visitors must take full responsibility for their own safety outside of visitor sites. • No visitor infrastructure provided. • No set acceptable risk level as no safety management provided.		

3.2. Risk thresholds for Site Control Plans

Lower, medium and higher risk threshold matrices for use in Site Control Plans

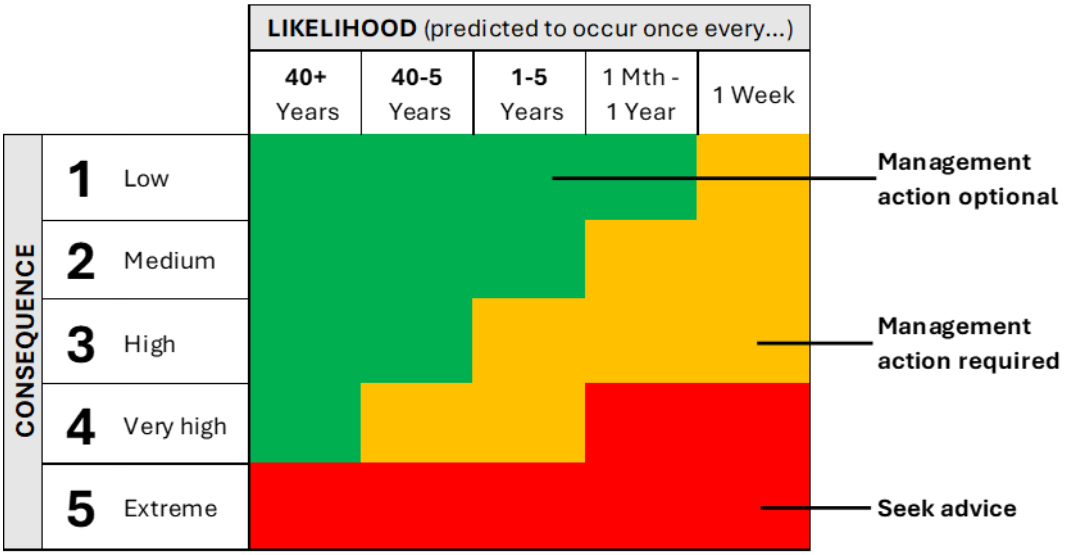
SITE CONTROL PLAN ASSESSMENT - LOWER RISK THRESHOLD VISITOR SITES

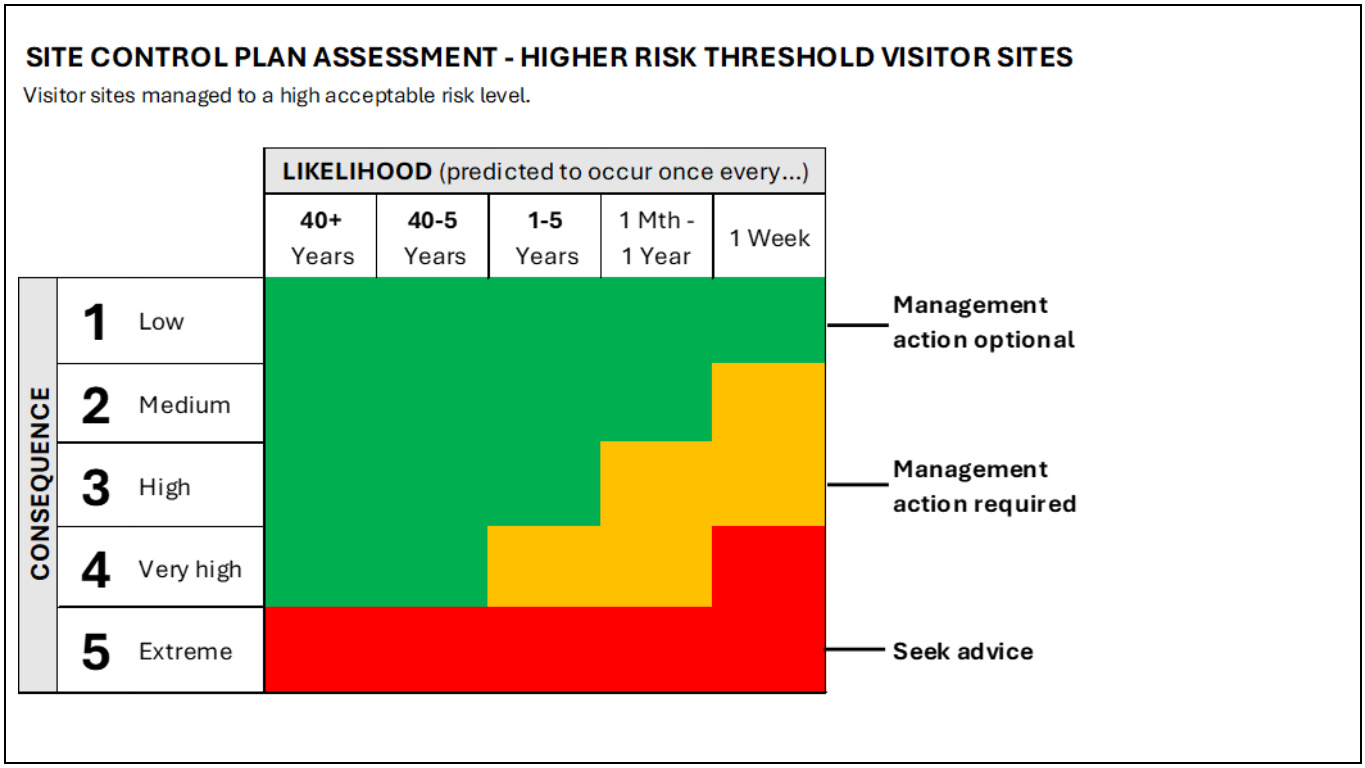
Visitor sites managed to a low acceptable risk level.



SITE CONTROL PLAN ASSESSMENT - MEDIUM RISK THRESHOLD VISITOR SITES

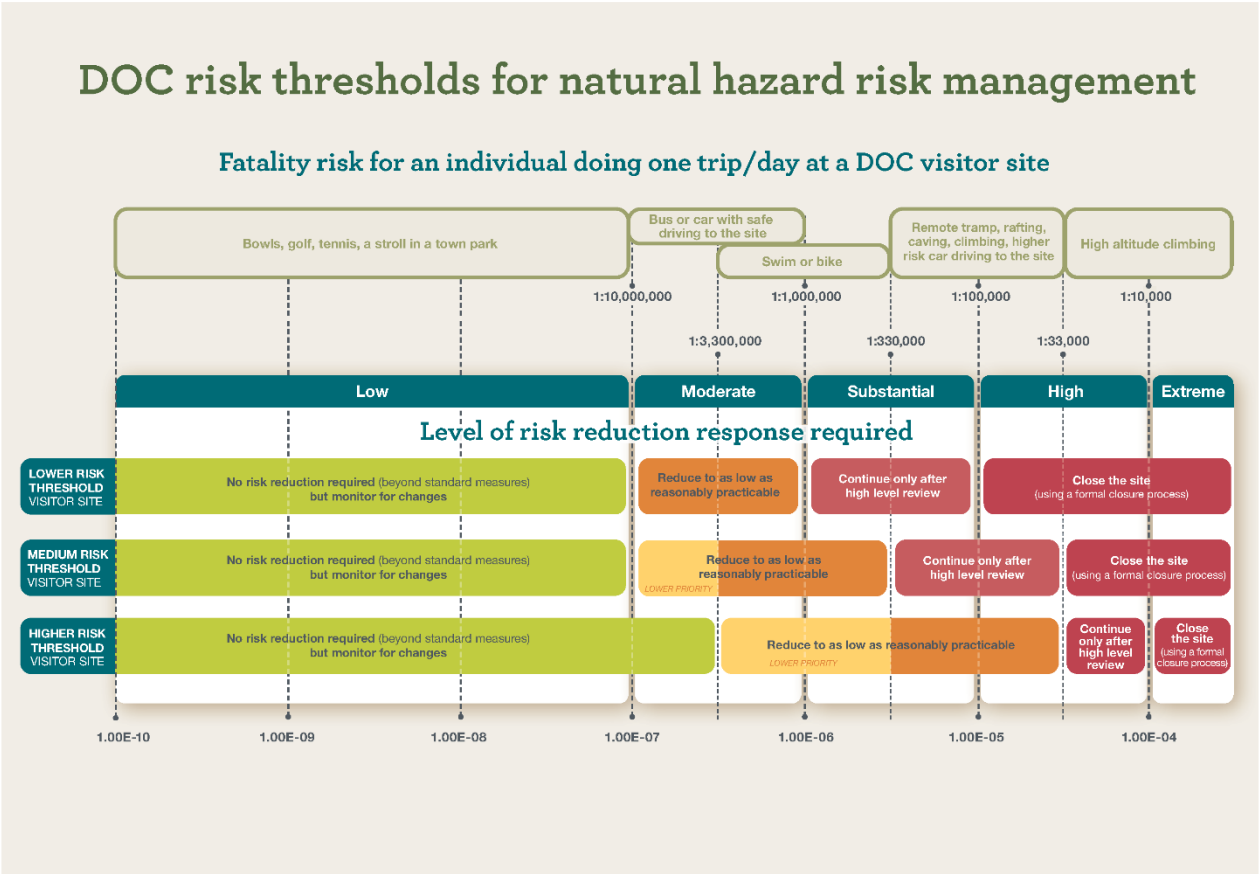
Visitor sites managed to a medium acceptable risk level.





3.3. Natural hazard risk thresholds for the GNS methodology

Full resolution natural hazard risk threshold chart available in docCM: [DOC-7524999](DOC-7524999).



4. What to do for in-house visitor risk assessments

4.1. Risk assessment using Site Control Plans

DOC uses a qualitative risk assessment approach in the Site Control Plan (SCP) process to evaluate risk to visitors from identified hazards. This method relies on the knowledge of the assessment team and incident records. It doesn't require expert consultants.

In this method, the assessment team – comprised of local district staff, a member of the visitor safety team, and any relevant subject matter experts – assess the consequence and likelihood of a hazard (in an unmanaged state) to determine the risk level and whether risk management is needed. This is a social process that draws on a team environment and the risk assessment matrices to guide you towards a site appropriate management decision.

Consequence: Measures the severity of harm that could be caused by the hazard (e.g., multiple fatalities, single fatality, minor injury).

Likelihood: Measures how frequently harm could be caused by the hazard (e.g., once every five years, monthly, weekly).

To do the evaluation, the assessment team identifies the **realistic** incident scenarios where a visitor could be harmed by the hazard being assessed. The following are considered:

a) The visitor site's attributes (track type, length, level of challenge etc).

b) Visitor use in the current state, as well as forecasted use where visitation is rapidly changing.

c) The nature of the hazard in the current state, as well as forecasted where it is rapidly changing (e.g. becoming more frequent due to climate change).

d) Known or documented incidents where visitors have been harmed.

e) Known or documented near misses where visitors could have been harmed.

f) Observed visitor behaviour, such as walking around or climbing barriers.

The scenario that requires the highest level of management is selected if multiple scenarios exist.

Hazard consequence is evaluated using the table below:

Hazard consequence	Explanation
Low	Minor injuries needing first aid, like cuts and bruises. No follow-up needed.
Medium	Moderate injuries needing immediate off-site medical treatment. Search and rescue may be involved. Incident reported.
High	Serious injuries to an individual, or moderate injuries to multiple people. Search and rescue involved. Incident investigated.
Very High	Single fatality or serious injuries to multiple people. Incident investigated.

Extreme	Multiple fatalities. Incident investigated.

Hazard likelihood is evaluated using the table below:

Hazard likelihood	Explanation
Predicted to occur once every 40 years or more.	No team member has knowledge of it happening, but it is possible.
Predicted to occur once every 5 years to once every 40 years.	A team member knows it has happened in the past.
Predicted to occur once a year to once every 5 years.	A team member knows it happens occasionally.
Predicted to occur once a month to once a year.	Multiple team members know it happens regularly.
Predicted to occur at least once a week.	All staff know it happens frequently.

The assessment results are plotted in the risk matrix for the type of visitor site being assessed. There are three possible outcomes:

1. **Management actions optional**: Risk is within acceptable limits. Standard actions like providing pre-visit information are appropriate, but generally, no further actions are needed. Consider environmental, visitor experience, and resource impacts before acting.
2. **Management actions required**: Risk exceeds acceptable limits without management action. Best practice or site-specific actions are needed to reduce risk to an acceptable level.
3. **Seek advice**: Risk is unacceptable and needs further technical investigation or advice. Quantitative risk assessment may be needed. Get approval from the Accountable Manager and advice from the visitor safety team before proceeding.

4.2. Examples of Site Control Plan risk assessment

Example 1:

- Hazard: Landslide/rockfall on a Walking Track (lower acceptable risk level).
- Likelihood: Rockfall crosses the track about once every five years.
- Consequence: Could cause a single fatality or multiple serious injuries. (Very high consequence rating).
- Action: Staff need to follow the landslide/rockfall hazard management guidance and apply appropriate mitigations as it falls into the 'management actions required' category.

Example 2:

- Hazard: Adverse weather on a Tramping Track (higher acceptable risk level).
- Likelihood: The adverse weather happens regularly, between weekly and monthly. Causes hypothermia to a visitor three times a year.
- Consequence: Moderate injury requiring medical treatment. No search and rescue involvement and no fatalities. (Medium consequence rating).
- Action: No further mitigation needed as it falls into the 'management actions optional' category.

5. What to do for visitor risk assessment by external experts

5.1. Risk assessment using the GNS methodology

DOC uses a risk analysis methodology for experts to assess risk from landslides, tsunamis, and volcanic and geothermal hazards at visitor sites on PCLW.

This methodology has been created for DOC by GNS Science to help us make sound, consistent decisions about natural hazard management. It enables us to assess if the risk level is acceptable for visitors and if it can be reduced.

It is mainly used to assess landslides and rockfalls as these are the most common natural hazards that affect our visitor sites. The landslide methodology also covers debris flows and volcano flank collapse. It's used when significant investment is being considered to inform asset design, placement, or viability or when there is a significant change in site use or hazard levels.

The methodology identifies:

- The amount of risk at a site.
- If the risk is changing over time.
- If the risk is acceptable for the visitor experience.
- If the risk can be reduced to an acceptable level.
- If risk reduction is feasible and cost-effective.

There are three levels of analysis:

1. **Preliminary Assessment**: A screening tool to identify landslide hazards and decide if further assessment is needed. It classifies the hazard level (1-4) and guides the next steps.
2. **Basic Assessment**: Quantifies risk at a basic level for tracks, roads, huts, carparks, etc. It checks if the risk is within our risk thresholds for visitor sites. Recommendations for risk mitigation are provided.
3. **Advanced Assessment**: A detailed risk analysis requiring more time, data, and resources, including peer review of the risk calculations.

Decision process:

Once we get a natural hazard risk assessment, an expert panel reviews it. The panel includes:

- The report's author.
- A geotechnical engineer (when additional subject matter experts are required).
- A visitor safety team member.
- The Operations Manager
- The Principal Ranger, and other relevant staff.

They support the Operations Manager decide how to manage the risk at the site.

The methodology is set out in six GNS Science reports:

- Part 1 – methodology overview (doc-6349010)
- Part 2 – framework for landslides (doc-6349021)
- Part 3 – guideline on landslides for point & linear features (doc-6349027)
- Part 4 – commentary on landslides for point & linear features (doc-6349039)
- Part 5 – framework for tsunamis (doc-6349047)
- Part 6 – framework for volcanoes (doc-6349075)

Documents for Geotech consultants:

- Consultant brief template – preliminary landslide assessment (doc-6897155)
- Consultant brief template – basic landslide assessment (doc-6896590)

Contact the visitor safety team to source and brief a geotechnical consultant.

5.2. When to use the GNS methodology

Use the GNS methodology when:

- Developing a new visitor site or making significant investment in one.
- Landslide risk is ongoing and the risk needs to be understood.
- You can't determine if the risk is acceptable using a Site Control Plan.
- You need to decide if the risk can be reduced or if the site needs major changes or closure.

Don't use this method for qualitative geotechnical assessments focused on engineering or repairs, or when you already understand the risk well enough to make a decision.

Don't use the GNS methodology when:

- The landslide risk is no longer present.

- The risk is already known to be acceptable.
- The focus is on engineering or repair options, not risk quantification.
- A Site Control Plan assessment is enough to understand the risk.

Examples of when you should and shouldn't use the GNS methodology.

Scenario A

The 42 Traverse shared use walking and biking track in the Central North Island.

A large landslide has occurred, triggered by heavy rain.

A 150m section of track has been destroyed.

The slope above and below the track is affected and there is ongoing instability.

Image A. The red dots show the 42 Traverse Track on either side of the landslide.

In this case the GNS methodology is required because:

- Landslide risk is ongoing – the slope is unstable, and the hazard is still present.
- The amount of risk needs to be quantified, so DOC can determine whether the risk is acceptable for the site.
- The assessment will inform us whether it is possible to lower the risk to an acceptable level and repair the track, or whether the track needs to be rerouted or closed.
- Without the assessment, a robust, defensible decision cannot be made.

Scenario B

The Timber Trail, shared use walking and biking track in the Central North Island.

A small landslide triggered by heavy rain.

The landslide has undercut the track and reduced its width.

The landslide was caused by large volumes of water overwhelming the track's water management infrastructure.

The slope uphill of the track is stable.

Image B. Small landslide on the downhill slope of a section of the Timber Trail Track.

In this case the GNS methodology is not required because:

- The landslide was caused by failures in the track's water management infrastructure. The landslide should stabilise once water is directed away from it.
- The hazard is no longer present, and the uphill slope is stable. Therefore, it is already known that the risk is acceptable, and the amount of risk does not need to be quantified. More risk information is not required for a decision.
- A simple qualitative assessment is sufficient, as the assessment is focussed on informing repair and water management options rather than risk quantification.

Example of a risk assessment using the GNS methodology:

Problem: land instability near a popular foot bridge

The Rob Roy Suspension Bridge is located on a popular walking track in the Matukituki area that is used to view the Rob Roy Glacier. Local staff noticed land instability upstream from the bridge, and did not know whether they needed to do more to manage the risk of rockfalls or landslides at this site.

Solution: an expert geotechnical assessment

They engaged a geotechnical consultant who completed a preliminary assessment using the natural hazard risk analysis methodology. This initial screening rated the rockfall risk as 'class 2'. The suggested action for a class 2 risk is to do further geotechnical analysis (termed a 'basic assessment') using the methodology. This provides a better understanding of the risk. Therefore, a second, more detailed assessment was commissioned – the basic assessment.

The consultant completed the basic assessment, producing a quantitative risk figure which was compared to the visitor risk threshold for the site.

Result: no changes needed

The basic assessment indicated that the risk of rockfall to visitors was low and no risk reduction was required.

The assessment provided confidence that the bridge did not need to be moved and no other rockfall mitigation was needed.

5.3. Natural hazard risk thresholds

DOC uses quantitative thresholds to assess and manage natural hazard risks. The thresholds used for decision making are based on the individual visitor fatality risk per day/trip.

Experts from GNS Science and TTAC Ltd developed these thresholds by analysing accident data, comparing risks and looking at international risk management systems. They provided us with recommendations in two reports:

- Risk Comparisons for DOC Visitors and Workers (doc-6391874)
- Guidelines for DOC on dealing with Natural Hazard Risk (doc-6391873)

DOC then considered the findings on comparable risks and what could be considered acceptable against contemporary risk levels at visitor sites. Thresholds were developed and categorised into lower, medium, and higher-risk threshold sites and approved by senior leadership.

Lower, medium, and higher-risk thresholds for visitor sites:

- **Lower risk threshold sites:** Comparable to low-risk activities, like playing tennis or safe driving.
- **Medium risk threshold sites:** Comparable to the risk from activities with some risk, like swimming or biking.
- **Higher risk threshold sites**: Comparable to high-risk activities, like climbing or remote tramping.

See section 3.1 for the types of visitor site that fall into each risk threshold category.

After a risk assessment, the findings are compared to the applicable risk threshold for the visitor site. Depending on the risk level and the site's risk threshold, our response will be one of the following:

- No risk reduction required.

- Reduce to as low as reasonably practicable.
- Continue only after high level review.
- Close the site.

DOC decision-makers must understand these thresholds and their implications for risk mitigation actions.

5.3.1. Natural hazard risk reduction response categories when using the GNS methodology

What the natural hazard risk reduction categories mean for DOC:
No risk reduction required (beyond standard measures)
Risk is low. Follow DOC's normal visitor asset management and visitor safety communication standards. Informally monitor for changes.
Reduce risk to as low as reasonably practicable (ALARP)
Operations Manager leads a team process to establish suitable mitigations. Use local team and experts (Principal Ranger, Supervisor, Visitor Advisor and Visitor Safety Advisor) to decide on necessary actions using the hazard management guideline. Ensure that the mitigations selected are proportional to the risk. Avoid costly and resource intensive measures. Reassess the risk if the hazard changes – a formalised monitoring regime may be required to identify changes.
Continue only after high level review
Director leads a team process to understand if the risk is acceptable and establish mitigations. Use local team and experts (Operations Manager, Principal Ranger, Supervisor, Visitor Advisor, Visitor Safety Advisor, and an external expert where required) to identify suitable risk reduction options. Consider significant changes to reduce risk like moving infrastructure. A Trigger Action Response Plan (TARP) may be needed, along with a formal monitoring regime to identify changes and respond to increased risk. Close the site using the Closures SOP (doc-7362830) if risk cannot be reduced to an acceptable level.
Close the site
Close the site using the Closures SOP (doc-7362830). Regional Director and experts across DOC decide the site's future. Brief the Senior Leadership Team on the discussions and decisions made.

Unless the site can be redesigned to eliminate the risk (such as moving a hut or rerouting a track), permanent closure and disposal of the site's assets is very likely at this risk level.

5.4. Risk assessment for huts and campsites using the Hancox methodology

When planning investment, development, or major changes at a hut or campsite with possible, but not yet identified, natural hazards use the Hancox methodology for huts and campsites (docDM-394511) to undertake an initial geological hazard screening and assessment.

This initial assessment helps determine if the site is suitable. Often, the results will be clear enough to make a decision, but it will also show if more detailed analysis is needed.

Contact the visitor safety team if you need support.

Example of a risk assessment using the Hancox methodology:

Relocation of Belltown Mananui Hut

The Belltown Mananui hut was built by DOC in 2001. After some time, a nearby stream started flowing under the hut, causing erosion and damaging its foundations. The problem got worse, making the site unsuitable.

The Backcountry Trust found a new nearby site for the hut. Before moving it, they needed to check for geological hazards to ensure the new site was suitable. A Geotech consultant used the qualitative assessment method to evaluate the new site. They looked at the site's geology and potential hazards like earthquakes, landslides, extreme wind, flooding, and foundation settlement.

The consultant's report showed that the risks were low, and the hut could be moved there if the foundations were designed to handle strong earthquakes. They didn't need a more detailed assessment.

In 2022, the hut was successfully moved and refurbished by the Backcountry Trust.

Geological Inspection Report for the proposed Belltown Hut (doc-6783663).

5.5. Role of societal risk in natural hazard risk management

Societal risk in DOC's natural hazard risk management means the chance of multiple people being killed by a natural hazard at a visitor site. It's hard to determine how much risk society is willing to accept in these cases.

Internationally, societal risk is usually linked to industries like transport and power generation, where many people could be involuntarily affected by an accident. On public conservation land, the risk is different because visitors choose to expose themselves to risk during recreational activities.

DOC's policies say that visitors are responsible for their own risk decisions. DOC must avoid unnecessarily restricting public access or decision-making rights, even when managing natural hazard risks.

Influence on DOC's decisions:

- DOC focuses on individual risk, respecting public access and choice.
- Making decisions based on societal risk, like closing sites, could limit individual access rights. In many cases individual risk might be acceptable, but societal risk could be higher due to visitor numbers and site usage.
- Societal risk tolerance is not defined in New Zealand law, so DOC should not attempt to define it without a wider mandate.
- Understanding societal risk can be useful for decision-making, especially if the risk is high. Such cases may require senior leadership involvement to weigh up the complex trade-offs.

5.6. When to include societal risk when using the GNS methodology

When to include societal risk in assessments:

When doing an assessment, think about whether you need to analyse societal risk for:

- Popular overnight spots like huts, lodges, and campsites.
- Places where groups of people often gather.
- Busy sites where visitors are often crowded together on tracks or structures.

These factors should be discussed during the assessment planning between the visitor safety team and the local district office. The district's Operations Manager decides whether to include or exclude societal risk.

6. Document records

6.1. Other useful information

- Visitor Safety Management Policy (docDM-1562377)
- Hazard management guideline for visitor sites (doc-7462131)
- Visitor Safety Closures SOP (doc-7362830)

6.2. Document history

Date	Details	Document ID and version	Amended by

13 February 2024	Final draft ready for DDG approval. Document developed by the visitor safety team. Quality checked by the SOP Team.	doc-755122 Revision #10	[redacted]
28 February 2024	Approved for use by Stephanie Rowe (DDG – BHV).	doc-755122 Revision #11	[redacted]
6 August 2024	Addition of a section on the role of societal risk in expert quantitative natural hazard risk assessment and when to use it (5.3 and 5.4). Confirmed as a minor change not requiring DDG approval by the SOP team.	doc-755122 Revision #12	[redacted]
7 August 2024	Correction of typo in section 5.3.	doc-755122 Revision #13	[redacted]
18 November 2024	Correction of typos in risk threshold chart (5.2.1).	doc-755122 Revision #14	[redacted]
15 May 2025	Simplified and edited for plain language as part of the Shared Services improvement and AI enablement work. Qualitative risk assessment method and thresholds updated to align with the natural hazard risk thresholds – lower, medium, higher. Visitor groups removed and replaced with visitor site type to align with the updated visitor safety management policy. Policy level direction moved up to the policy level to strengthen the document hierarchy and avoid duplication.	doc-755122 Revision #15 Approved by BHV DD-G	[redacted]
5 June 2025	Added visitor safety management diagram to section 3 and adjusted formatting.	doc-755122 Revision #16	[redacted]
12 June 2025	Changed ‘tolerance’ to ‘threshold’ in the GNS methodology section to align with language used for Site Control Plans.	doc-755122 Revision #17	[redacted]

About this document

Disclaimer	This document has been written for Department of Conservation (DOC) staff. As a result, it includes DOC-specific terms and refers to internal documents that are only accessible to DOC staff. It is being made available to external groups and organisations to demonstrate departmental best practice. As these procedures have been prepared for the use of DOC staff, other users may require authorisation or caveats may apply. Any use by members of the public is at their own risk and DOC disclaims all liability for any risk.
Document Coordinator	[redacted], Senior Advisor, Visitor Safety and Standards
Document Owner	Catherine Wilson, Director, Heritage and Visitors
Approved for use by	**Stephanie Rowe, DD-G Biodiversity, Heritage and Visitors Group** Date: 11/05/2025 Approval memo: DOC-10215913
Last reviewed	**15/05/2025** (Check this document within three years to ensure it is up to date).
Classification	UNCLASSIFIED
docCM ID	DOC-7555122