



Date: 6 May 2026

To: Nick Kelly, Operations Manager - Whitianga

CC: Tinaka Mearns, Regional Director Hauraki, Waikato, Taranaki.
Cat Wilson, Director Heritage and Visitor

From: Rachael McMillan, Senior Visitor Advisor and Tania Short, Principal Advisor, Heritage and Visitor Directorate

Subject: Waimata Gemstone Bay Options Paper

Purpose

1. This paper sets out the context and damage to Waimata Gemstone Bay infrastructure, the assessment methodology used, the options considered, and recommendations for next steps.

Recommendation

2. Note providing access to Waimata Gemstone Bay no longer appears to be viable due to repeated loss of infrastructure, ongoing instability, no feasible alternative route, ongoing vulnerability to weather events and the need to use limited funding effectively.
3. Note the evidence indicates removal of the track to Waimata Gemstone Bay is the preferred option.
4. Agree/not agree – DOC makes a deliberate shift to focus on the core experience to provide reliable access to Mautohe Cathedral Cove via the Grange Road carpark and primary track rather than spread effort to a vulnerable access point.
5. Propose consulting with key stakeholders and informing the public regarding the removal of the track to inform the final decision paper.

Executive Summary

6. The Cathedral Cove Recreation Reserve is a nationally significant visitor destination with persistent infrastructure vulnerability due to unstable coastal terrain and subject to frequent extreme weather events. The primary visitor destination is the Mautohe Cathedral Cove rock archway. The nearby Waimata Gemstone Bay is accessed by a side track off the main Cathedral Cove walkway leading to a small stony bay, historically used for marine reserve education and snorkelling.
7. Geotechnical assessments and landslide predictive modelling indicate the area is susceptible to landslides and rockfalls, especially during and immediately after high rainfall events¹.

¹ Tonkin & Taylor July 2023 Cathedral Cove Basic Level Landslide Risk Assessment DOC-7669260, Tonkin & Taylor May 2024 Cathedral Cove Track Feasibility Assessment DOC-7645108, Tonkin & Taylor April 2025 Gemstone Bay Geotechnical Feasibility Report DOC-10705786, and Wigmore, O. March 2024 Hahei Cathedral Cove Landslide Risk Modelling DOC-7879967

8. The access stairs at Waimata Gemstone Bay were destroyed by Cyclone Gabrielle (2023), and an alternative access rebuild project initiated in October 2025–26 was destroyed by severe storms in January 2026 before it could be completed.
9. Conclusions from adaptation planning² for the entire recreation reserve acknowledged:
 - a. The unstable terrain of the Cathedral Cove Recreation Reserve significantly limits the type and quality of visitor infrastructure that can be provided and must be considered in all investment.
 - b. The archway at Mautohe Cathedral Cove is the primary visitor attraction and is the main priority for access investment.
 - c. Track and structure damage will continue due to natural hazards.
 - d. Low-cost, lightweight infrastructure is preferred, as resilient structures offer little benefit when the surrounding landscape remains unstable.
 - e. Repairs should be prioritised only if visitor risks can be managed to an appropriate level and are cost-effective for the benefits gained.
10. The decision following Cyclone Gabrielle based on these conclusions was to rebuild low-cost, low-complexity infrastructure and reopen access to Waimata Gemstone Bay, accepting a low-complexity rebuild could be more easily reinstated by the Coromandel District Operations Team in the future.
11. The alignment chosen was identified as the most viable, with the fewest impacts of the proposed access reinstatement options. No other options could be considered due to landscape constraints. It was acknowledged this rebuilt access could be destroyed in the future due to the unstable landscape. While this alternative access was being installed, severe storms in January 2026 destroyed the rebuilt steps just before completion.
12. DOC used decision-making methodology designed following Cyclone Gabrielle, as well as Adaptation Plan criteria, to assess the recent storm damage, the previous track access route, the damaged alternative alignment, and previous rebuild options considered after Cyclone Gabrielle.
13. Options were assessed against key criteria including the level of infrastructure vulnerability informed by geotechnical investigations, predictive landslide modelling, statutory obligations, iwi and community expectations, cost-effectiveness, environmental impact, cultural values, and visitor safety.
14. The assessment of options found there is no viable alternative to the current track alignment destroyed in the recent storm event. The infrastructure vulnerability, likelihood of future storm events, environmental impacts, and infrastructure costs are considered to be too high to warrant the benefits of reinstating the access for a second time.
15. Previously Waimata Gemstone Bay track was one of the only access points to the marine reserve for snorkelling and marine education. However recently the boundaries of the marine reserve have been expanded providing opportunities in other points for access that visitors and educators can use.
16. It is recommended to inform the public and invite feedback. Key stakeholders representing the Te Whanganui o Hei Marine Education Trust have discussed the proposal with DOC, and their feedback indicated they understood and

² Mautohe Cathedral Cove Adaptation Plan 2025 [Adaptation Plan SharePoint](#)

appreciated the need to remove the Waimata Gemstone Bay track, decommission the damaged stairs and spur track and restore the site to nature.

Assessment

17. Table 1 shows the decision-making process flow chart³ used to guide this assessment. The first step was to understand the risk/damage.
18. District staff along with geotechnical experts undertook damage assessments in early February 2026. The new access track was damaged by the January 2026 storm with one landslide undermining several stair sections near the bay. Geotechnical experts noted the headscarp of the landslide appeared to be approximately 10m above the bay and approximately 5m wide. Although this is likely to be erosion of surface material small slips around this landslide could continue as the headscarp regresses and settles down and while vegetation re-establishes.
19. Damage assessments confirmed ongoing erosion, and coastal scour had undermined the shallow stair foundations and will continue to impact the site over time. The site sits within unstable, bouldery colluvium and is subject to continued coastal surge risks.

Landslide and track damage: Photo DOC



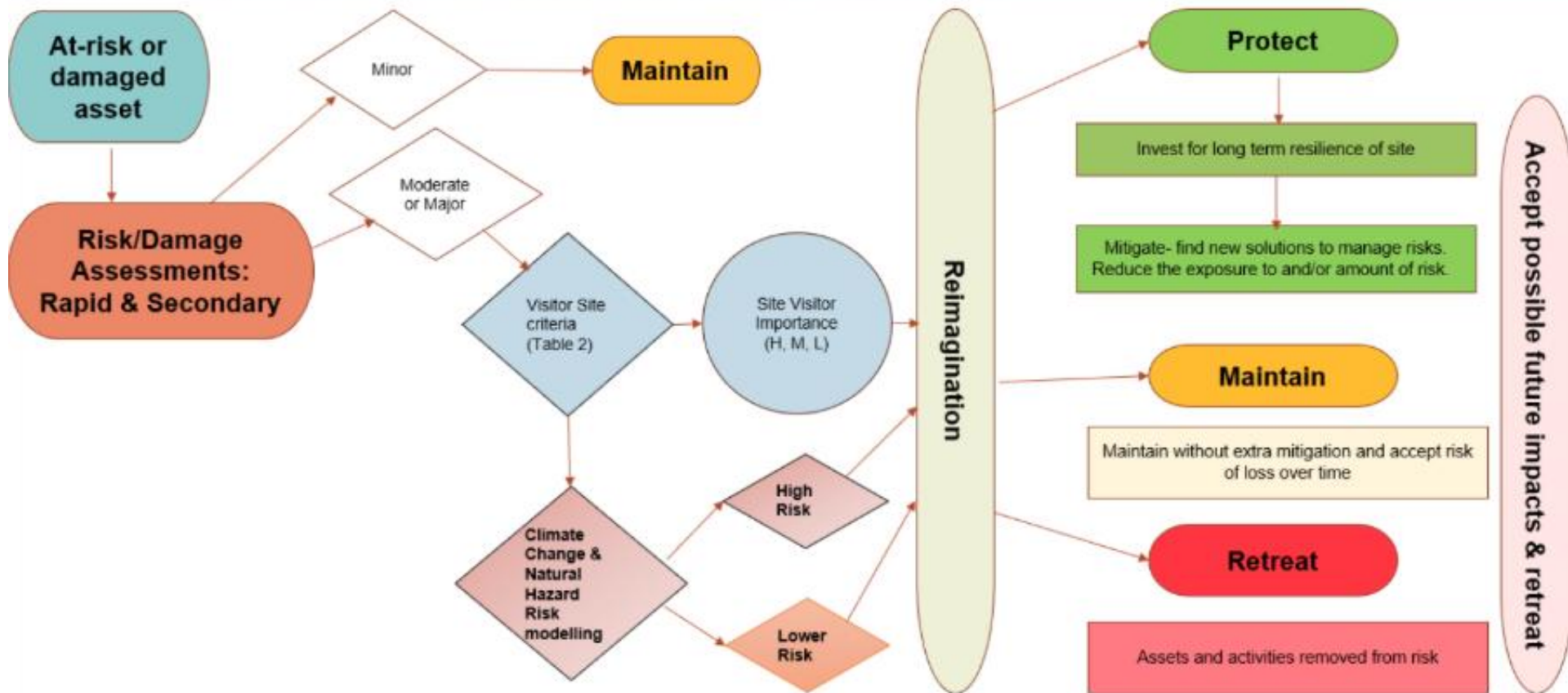
³ Decision making process flow chart developed by the Cyclone Recovery Programme 2023-2024



20. This site damage was assessed as major, requiring funding beyond the District baseline and specialised project management to rebuild⁴.
21. The next step of the assessment is to consider visitor site criteria, importance of the site and climate change and natural hazard risk modelling.

⁴ Cyclone Recovery Programme categorisation: Minor – Repairs can be completed by District staff with minimal additional resource. Moderate – Repairs require support from outside the District and may need extra resource beyond the current budget, though not higher-level project management. Major – Repairs require significant additional resource, specialist expertise, and project management for more than 12 months.

Table 1: Your step-by-step decision-making tool



Workshop Assessment

22. A workshop was run with District staff and key advisors to consider the site and potential options. The site assessment criteria was developed by the Cyclone Recovery Programme and modified to include Future Visitor Network and other considerations.

Table 2: Site assessment criteria

ASSESSMENT CRITERIA ⁵	DESCRIPTION
What do statutory documents say about the destination?	The CMS shows clearly the importance of overland access to Mautohe Cathedral Cove but does not specify the importance of access to Waimata Gemstone Bay.
Is this site material to the visitor experience?	It is not a primary draw for the international visitors. Most NZ marine reserves require access by boat or long demanding walks. Waimata Gemstone Bay's five-to-ten-minute walk to a compact sheltered bay, makes education in a marine habitat accessible at a low cost. This is a secondary experience.
Are environmental & heritage impacts from the visitor experience able to be managed? Is the management consistent with the reasons the site is PCLW? (Incl compliance with statutory)	Overall, the whole of the Reserve is a taonga to Ngāti Hei. Impacts are manageable within statutory settings.
Have iwi, hapū or whānau raised issues regarding management of the site?	Ngāti Hei input following Cyclone Gabrielle includes support for keeping access open, they value the education programmes; preference is for a simple approach to infrastructure rebuilds and they do not support impactful modifications.
Is the site well used, what Tier is it in the FVN? Visitor data? e.g. the Strategic intentions tool tests? <i>OR</i> is it regularly used for educational purposes?	Cathedral Cove Reserve is Tier 1; Waimata track Tier 2; there are no counters for exact visitor numbers; the site has been closed since Cyclone Gabrielle; it is a secondary experience previously used consistently for education programmes. Waimata Gemstone Bay has been popular with locals for access to snorkelling, and for school groups for marine education. It is worth noting the boundaries of the marine reserve have recently been widened. This means there are now several other opportunities to access the marine reserve for educators and locals.
Is the site managed more for biodiversity, heritage, infrastructure or agreements with other parties than for its visitor value?	The site used to be managed for biodiversity in the marine reserve and there was strong third-party interest for snorkelling/ education.
Does the site have known significant visitor safety risk? (risk that could cause serious harm)	The risk level is the same level we accept across the wider reserve. With the TARP/storm closures and other mitigations in place – the risk to visitors can be managed to an acceptable level. The geotechnical advice states the key issue at this site is infrastructure vulnerability, which will continue.

⁵ Modified from the Cyclone Recovery Programme criteria

<p>Is the site vulnerable to ongoing natural hazards (including climate); technical assessment show natural hazards risks are minor? How often has significant weather damage occurred (40 years?)</p>	<p>Tonkin & Taylor historic landslides inventory from 2023 showed at least nine landslides in the target area⁶ and landslide predictive modelling⁷ places Waimata among the higher risk areas in the reserve for further landslides. Tonkin & Taylor staff inspected the site post storm in Jan 2026⁸. They referred to their previous Tonkin & Taylor April 2025 Gemstone Bay Geotechnical Feasibility Report stating this had the required information on the resilience of the track. The April 2025 report found:</p> <p>The key geotechnical hazards include the following:</p> <ol style="list-style-type: none"> 1) Coastal surges and coastal erosion of soil undermining the beach access location. 2) Slope instability of the small coastal cliff. 3) Uncertain and variable founding materials. 4) Stream erosion. <p>There is also potential for landslides and rockfall from higher up the hill slope and coastal cliffs to inundate or undermine the track. In the options analysis for developing the steps that were damaged in Jan 2026, Tonkin & Taylor noted the final steps leading down to the beach will likely need replacing in the future due to coastal erosion or stream erosion. There is evidence of land instability and likely to occur in the future.</p> <p>The other options for reinstating stairs in the initial location prior to Cyclone Gabrielle would require significant engineered foundations and geotechnical stabilisation at high cost, with no guarantee of long-term resilience in a dynamic coastal environment. This landslide and storm surge reoccurred within three years of Cyclone Gabrielle.</p>
<p>Does it provide an experience key to a diverse or unique offering at a regional scale? (uniqueness or representativeness)</p>	<p>Provides a quieter experience within the Reserve offerings but is not a primary drawcard.</p>
<p>Is there a comparable alternative experience (DOC & non-DOC) within a similar travel distance of key population centres?</p>	<p>Alternatives exist – both marine and land-based from Cooks Beach and Pūrangi.</p>
<p>If the site is managed for cost recovery, does it achieve a reasonable level of cost recovery?</p>	<p>Not managed for cost recovery.</p>
<p>Does the site align with the relationship the community has with its natural and cultural heritage?</p>	<p>Site valued by community, particularly the Te Whanganui o Hei Marine Reserve Education Trust</p>
<p>Can the visitor experience be achieved with a lower site service standard?</p>	<p>Not applicable. The issue is not resolved via standards.</p>
<p>Can reimagination of the site resolve the problems identified?</p>	<p>The Adaptation Plan prioritises adaptive responses over permanence. There are no practical options for recovery at the site, given the landscape challenges.</p>

⁶ Tonkin & Taylor July 2023 Cathedral Cove Basic Level Landslide Risk Assessment p53-55, p66 DOC-7669260

⁷ Wigmore, O. March 2024 Hahei Cathedral Cove Landslide Risk Modelling DOC-7879967

⁸ [Email T+T Cathedral Cove Horizontal drainage](#)

<p>Is divestment or managed retreat an option to explore? Does it warrant continued investment for the cost to reinstate and the usage and function the asset performs?</p>	<p>Divestment must be considered given the issues. Next steps is to look closer at the options including retreat.</p>
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Options analysis

23. Staff explored reimagining the site as per the Table 1 decision flow chart – protecting, maintaining or retreating. Table 3 outlines the four options considered. These options were considered against the following criteria from adaptation planning to ascertain if the infrastructure should and can be rebuilt in that location.

- a) The solution is geotechnically and structurally achievable within acceptable costs.
- b) The solution has iwi support.
- c) The benefit of replacing infrastructure is higher than the costs of rebuilding.
- d) Environmental impacts can be mitigated to less than minor.
- e) There are no cultural heritage impacts, or they can be mitigated to an acceptable level.
- f) Visitor safety remains within acceptable thresholds.
- g) Solution has a minimal landscape and visual impact (CMS alignment).
- h) The solution is cost-effective and can be reinstated quickly post event.
- i) It is financially achievable for the department.
- j) The solution supports the overall visitor experience - access, enhancement, flow, etc.
- k) Aligns with DOC strategic outcomes.
- l) Aligns with national investment priorities.
- m) The solution is consistent with infrastructure treatment across the reserve in a vulnerable landscape.

Table 3: Options analysis

OPTIONS	ANALYSIS
<p>1) Repair in the same place.</p>	<p>Reinstating the structure in its original location is not feasible. Geotechnical inspection in Jan 2026 confirmed an active landslide immediately at the stair site, with continued instability expected as the headscarp regresses and surface materials continue to move. Previous reports in 2023 and 2025 noted the significant land instability and vulnerability to natural hazards in Waimata Gemstone Bay.</p> <p>This option fails the criteria relating to natural hazard vulnerability, structural feasibility and cost-effectiveness. If rebuilding were to proceed despite this advice, no rebuild could occur until at least six months of stabilising vegetation has regrown.</p> <p>Given the terrain, and the fact the new unfinished infrastructure was damaged within three years of Cyclone Gabrielle, any additional future rebuild would likely leave the assets vulnerable to repeated failure, and therefore it would be a poor investment to continue with replacement.</p>
<p>2) Repair in a better spot.</p>	<p>Geotechnical advice in April 2025 found no alternative track alignment met acceptable cultural and environmental thresholds, other than the route that was used to build the steps destroyed in January 2026.</p>

	<p>Fails to meet the Adaptation Plan requirement for light, low-complexity, easily replaceable infrastructure, as April 2025 geotechnical advice shows any functional stairway here would require heavy engineering with high cost and no assurance of long-term stability.</p> <p>This contradicts the adaptation approach⁹, performs poorly on financial, environmental, and landscape impact criteria¹⁰, and lacks feasibility under climate and natural hazard risk modelling¹¹.</p>
<p>3) Rebuild in the same location once the slip has stabilised.</p>	<p>This location has been determined as not acceptable because of the unstable terrain, with the slip approximately 10 m long and 5 m wide, with continuous water input and unstable colluvium. Monitoring would be needed to determine slip stability.</p> <p>Reinstating infrastructure in this location remains high-risk, with a very high likelihood of repeated damage.</p> <p>Financially, this represents a poor use of limited funding, as each rebuild may cost up to \$80,000 per event with no guarantee of durability.</p> <p>This option therefore fails criteria related to cost-effectiveness, infrastructure vulnerability, risk, and alignment with DOC's investment priorities.</p>
<p>4) Retreat and remove – preferred.</p>	<p>Retreating and decommissioning the stairs aligns most strongly with the Adaptation Plan, which prioritises adaptive responses over permanence in unstable landscapes.</p> <p>Decommissioning costs are comparatively low \$28,100 if completed alongside Te Karaka, or \$36,530 if done separately and represents the most fiscally responsible option.</p> <p>The Te Whanganui o Hei Marine Reserve Education Trust and potentially Ngāti Hei may be directly impacted. However, retreat does not preclude future marine-based access solutions being explored by stakeholders.</p> <p>Given ongoing instability, the absence of a viable alternative alignment, and fiscal settings requiring recovery within DOC baseline budgets, retreat aligns with the criteria for cost and investment priorities, environmental impact, climate change and statutory obligations.</p>

Conclusions

24. The assessment of options found there is no viable alternative to the current track alignment destroyed in the recent storm event. The infrastructure vulnerability, likelihood of another storm event(s), environmental impacts, and infrastructure costs are too high to warrant the benefits of reinstating the access for a second time.

⁹ Adaptation approach noted in paragraph 8 of this report.

¹⁰ [Social](#), and [environmental](#) impact assessments

¹¹ See Table 2: site assessment criteria on natural hazard vulnerability

25. Investment decisions for Waimata Gemstone Bay must recognise the low likelihood any rebuilt access would remain intact given damage occurred within three years of the previous storm and Geotechnical assessments and predictive modelling confirms a high probability of continued instability at the location of the destroyed stairs. No alternative route is feasible within acceptable environmental or geotechnical limits.
26. Rebuilding the structure would require investment of up to \$80,000 per event, with no assurance of durability or spacing between destructive weather events. By contrast, decommissioning the access is estimated at \$28,100 if completed alongside Te Karaka Stingray Bay, or \$36,530 if done separately. These figures exclude potential removal of compacted subbase material and vegetation restoration but align with the approach taken at Te Karaka Stingray Bay.
27. Given fiscal settings requiring future recovery costs be managed within operational budgets, investment in an asset with a high probability of repeated failure is not supported.
28. The preferred option is to permanently remove the damaged stairs and spur track to restore the site to nature - recognising ongoing instability, repeated loss of infrastructure, no feasible alternative route, and the need to use limited funding effectively. It is recommended to consult with key stakeholders and to inform the public, to guide the final decision paper.