

SOUTH WAIRARAPA DISTRICT COUNCIL

7 JULY 2021

AGENDA ITEM C8**HINEKURA ROAD UPDATE****Purpose of Report**

To update the Committee on the current situation, progress made and plans to remedy the road drop at Hinekura Road.

Recommendations

Officers recommend that the Committee:

1. *Receive the Hinekura Road Update Report.*
2. *Note the activities undertaken and planned to remedy the situation.*

1. Executive Summary

As previously reported to the Committee, a section of Hinekura Road had dropped as a result of the road sub-surface being undermined by water coming down the hill above. This movement was exacerbated by significant rainfall (160mm+) on the night of the 21st June, which saw the road shift more than a metre.

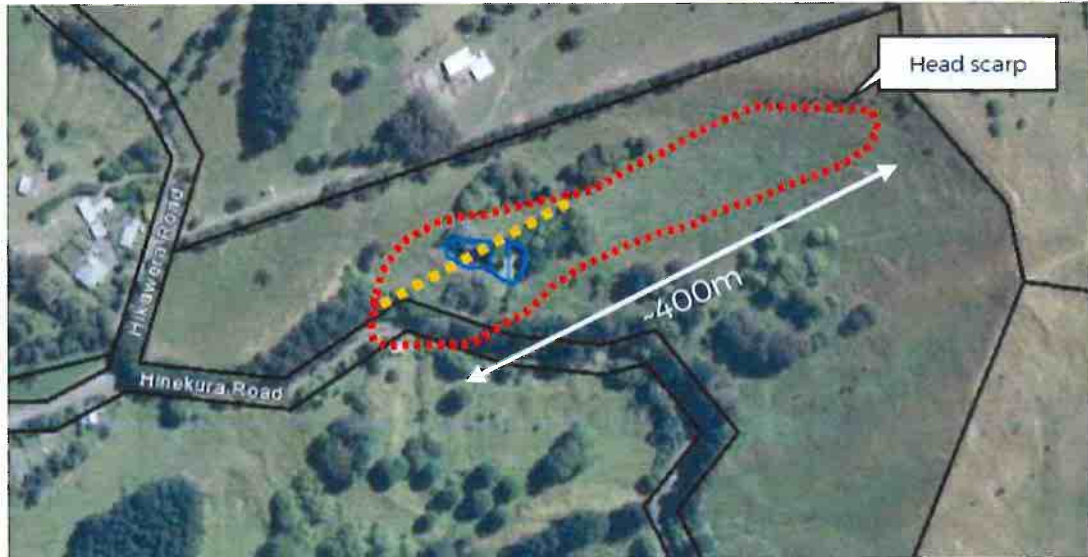
As a result, the road has been closed at various times and heavy traffic is not currently permitted on the road itself. An alternative route is available but is 20 minutes longer and takes more time to use. This has caused significant impact and inconvenience for residents in the area and South Wairarapa District Council (SWDC) is undertaking remedial action to enable improved short-term access, while developing a long-term solution with Greater Wellington Regional Council (GWRC) and the landowner.

2. Background

Last year, after concerns were reported to Council by the landowner of 1673 Hinekura Road of a large landslip within their property, which spans the road, a consulting geotechnical engineering report was commissioned by SWDC to further understand the situation. Following inspection, surveying and landowner discussions, this report identified the slip as an active, dynamic and widescale issue that required short-term mitigation and monitoring to further understand the nature of the slip and its root causes before undertaking substantial works. The risk of undertaking such reactive works on the road, without this understanding of the root causes, was that it had the

potential to cause the complete loss of the road area. Such work could also cause significant damage to the neighbouring property and its water supply.

The area of the landslip is substantial (approx. 450m x 150m, shown in red, below) and includes the water supply for the property at 1673 Hinekura Road (shown in blue). The area requiring recent tree felling extends beyond this indicative red line.



While some overflow from the dammed water supply is present (as identified by the yellow arrows), it is likely that water from above is also of concern, as shown by the tension cracking above the dam in the image, below. (The red and black lines identify a possible line of tension that may require further investigation.)



Based on the geotechnical analysis report and roading assessment, the following short-term actions were undertaken by Council:

- Installation and weekly monitoring of survey marks on the road to identify any movement and especially accelerating rates of movement. (It is worth noting that no movement was observed during this time.)
- Further clearing of culverts and other drainage at the site
- Confirmation from GWRC that there are no regulatory mechanisms to require the dam to be drained to reduce the weight acting on the road, therefore a solution must be reached in agreeable partnership with the landowner, and
- Installation of an additional culvert in April 2021 to help address possible stormwater effects over the winter period.

The survey marks were monitored and no movement was detected in the area. However, through the 21st to the 23rd of June 2021, the area experienced significant rainfall (160mm+) that resulted in the road area shifting by approximately a metre. The following images (23rd June) show that shift and cracking in the road surface:





In addition, the hill at the top of the slip (within private property) also dropped and there are now approximately 3m drops there with the cracking in the paddocks also becoming more significant.

3. Discussion

3.1 Recent activity

With this shift, the road was closed to vehicle traffic due to the significant risk for further movement and alternative routes shared (noting these add significantly to user travel time). Since then we have been able to restore light vehicle access through the area by:

- Felling dangerous trees in the area (many leaning over or near the road) that presented additional risk (noting further trees have been removed this week),
- Continuing to clear drainage in the area (noting it can often refill after rain), and
- Metalling and cutting back the entry and exit points of the slip to allow for vehicle access and reduce loading on the slip itself.

Now that these activities have been completed it allows Council to undertake the first stage of drainage works to restore the overflow from the dam into the old culvert, which had been damaged by the slip. These works (drains cut into paddock and renewing the drain through area of tree felling) are scheduled for later this week (as at 6 July 2021), in consultation with the landowner. This will reduce any further loading in the area.

3.2 Further planned work

Based on our ongoing monitoring and a lack of further or subsequent movement in the area, Council may allow heavy vehicle access through the area week commencing 12th July. This will alleviate some resident concerns but will require further ongoing monitoring to ensure this increase in weight does not cause further slipping in the area. If movement is observed or further large rainfall is expected, it is possible that heavy vehicle access is again curtailed for safety reasons.

Extra survey points have also been installed to monitor the area and further engagement with GWRC, a Geotechnical engineer and the landowner on suitable actions to address the issues into the long term. GWRC and an additional resource are currently developing the plan for drainage in the area, and further tree planting to stabilise the hillside on private property, which is intended to be shared with the wider community.

This plan will inform the long term solution for the area.

3.3 Financial Considerations

To date, works have been covered by existing Council budgets. Longer term solutions and financing of these will be considered when known.

3.4 Additional Observations

Through this incident Council has identified that, in focusing on trying to keep people safe and addressing the roading access issue, the communications with residents and

wider affected stakeholders could have been better. However, with support from our communications team, we are now doing daily email updates, which have been positively received with additional information shared on social media and our website.

It should be noted that now some road access has been (or about to be) restored, further updates will be focused on the long-term solution as it is developed with GWRC and the landowner.

4. Conclusion

While this situation poses significant inconvenience for residents in this area, the nature of the ground, the considerable size of the slip, the fact that it is primarily on private property, that there are multiple springs in the area, a private water supply and risk of the complete loss of the road itself, means we need to be considered in our approach to resolving this complex issue.

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