1. Mauri McSaveney's EXECUTIVE SUMMARY

- 2. It was widely recognised soon after the 2005 event that the impact which the event had had on the residents on Awatarariki fan should not be allowed to happen again.
- 3. It was accepted that the disaster had been caused by a large debris flow and that there was much evidence that such debris flows had happened before, and would happen again if nothing were done.
- 4. The debris-flow processes, hazard and risk distribution at Awatarariki fan were studied to still current international standards, on the basis of the recognised sparse data provided by the one confirmed event that could be investigated.
- 5. The 2005 debris flow at Awatarariki fan was estimated by the best available techniques to have a volume of about 300,000 m³. In my opinion this means that the volume was definitely greater than 200,000 m³ but probably less than 400,000 m³ and unlikely to be improved on.
- 6. No engineering solution was found that would mitigate the impact of a 2005-sized event on future fan residents.
- 7. A decision has been made by Council to not proceed with any mitigation work.
- 8. Some of the remaining residents on the fan now think that they could accept the high risk to their life of a future debris flow of undetermined magnitude. I do not support that position.
- 9. I raise two hypothetical questions:
- 9.1. What if the 2005 debris flow had been a bit larger? Say a few more homes destroyed!
- ❖ The 2005 GNS Sciences report on the event would not have been the least bit different. The true volume and return period of the 2005 debris flow were not in the least bit relevant to the subsequent engineering analyses. The analyses would have been based on different input values but would have reached the same conclusions possibly in just as much inordinate time.
- 9.2. What if some of residents had been killed in the 2005 event?
- ❖ The entire legal process would have been very different. Maybe, some decisions would have been made quicker. Fan residents would have been very sad about the fatalities but maybe not so annoyed about the proposed plan changes.