

Hearing Aokautere Plan Change G

December 8th 2023

My name is Rosemary Gear and I am a retired Biochemist.

My husband and I have lived in Moonshine Valley (b) (2)(a) P15 since 1989 and built the first house in the subdivision. **Our property is on the south side of the valley adjacent to the Aokautere promontories and between Gully #1 and Gully #2 in Plan Change G.**

We are now retired from formal work and have spent the last 7 years working for Green Corridors, 5 of those specifically in the gully reserves in Aokautere/Summerhill.

For the past 34 years we have been involved in trying to protect the biodiversity in Moonshine Valley. We have two reserves, Tutukiwi with its remnant bush and old trees, and Moonshine Reserve which has been planted with natives along the narrow gully. We have had two surveys of our main stream undertaken six months apart in 2009 and 2010 by Logan Brown when he was working at DOC and we have kept a record of the birds seen in our Valley. Logan found koura, kakahi, long and short fin eels and the endangered Giant Kokopu. To date we have observed 22 native and endemic birds as well as many exotic birds in the Valley. We also have green geckos. Our biodiversity has been enhanced by the native plantings of residents through the length of the Valley, and we have worked to keep all this as healthy as we can.

At the time of the subdivision at the head of Gully #3, the meandering stream through Moonshine Reserve suddenly blew out and during rain events the opaque silt-laden water pours down from this development. A large scour pool has also formed (Arseneau 2022). The Developer did put in a sediment pond but it was never sufficient to mitigate this damage.

Similarly, at the time of the Woodgate subdivision the stream flowing down Gully #1 also became a torrent when it rained, and again horrendous damage and scouring (Arseneau 2022) has occurred on the property of #24 Moonshine Valley Road belonging to the (b) (2)(a) P15s. As with the Gully#3 stream, the silt in the water is appalling.

There is no doubt that both developments have been the cause of this damage and all this silt pours into the main stream flowing through Moonshine Valley, severely damaging the health of our stream. Tributaries flowing into the Manawatu River should **not** be contributing to the pollution in our river.

It is pointed out to us that erosion will occur naturally regardless of any developments and we know that, but the erosion in Gullies #1 and #3 has accelerated far beyond what could be termed natural.

The topography of Aokautere with promontories cut with gullies, is unique and ecologically valuable.

Plan G identifies these promontories above Moonshine Valley as areas where houses can be built along "fingers". We applaud the plan to protect all the gullies dissecting these promontories from degradation, and to work to return them in time to native bush. They are already regenerating in parts but development on the high land between them raises some serious challenges.

Stormwater generated from our intense rain events, which are increasing in frequency as we experience climate change, is something Council **must** approach in a different manner to the past. Letting runoff flow down gully slopes is a cheap and easy solution but it cannot happen now. I have

seen how the gully system I work in in Summerhill/ Aokautere has been damaged over the last few years as water from the properties above pours down the slopes, eroding the sides of the gullies and causing the ephemeral stream sides to collapse. Council need now to ensure the stormwater from the Aokautere promontories is captured and discharged in such a way that there is no runoff down both the slopes of Moonshine Valley properties and the gully sides, and the streams within the gullies are not degraded. Natives on these slopes cannot stop this erosion alone, as witnessed by flooding down our own slope which has uprooted 30 year-old native trees. Dr Forbes (Ecology Report 42A 2023) notes some gullies already have regeneration of totara and kanuka (Gully #3) which is encouraging. It is also essential that Council monitor and prevent any detrimental outcome from earthworks during development, and the damage currently being done to the freshwater ecosystem must be reversed. This could happen if Council enforce some simple rules.

With any subdivision above Moonshine Valley the rain will have reduced permeable surface to soak into and will need to be channelled elsewhere. Swales proposed along the tops of the slopes will help but these MUST be retained in Council ownership to ensure their correct maintenance.

My work in the gullies for Green Corridors has given me insight into compliance issues and Council really do not need the problem of solving this with multiple ownership.

In addition **to this**, careful consideration must be given as to where these swales discharge down the slope as all the slopes are fragile and liable to erosion and slippage. We already have slips and historical slips and they add to the silt flowing into the streams. Studies of the soil structure of the Aokautere area have shown fine particle content which makes them susceptible to erosion as well as poor drainage.

This next paragraph was written before the updated version of the Plan was sent to us on Monday. We understood that our concerns about overflow from detention ponds sited on the edge of the slopes during intense rain events had been listened to and they had been moved further in. However this is not on the new Plan. Instead we continue to have detention ponds right on the edge of the slopes and we know they will at times overflow, with real issues below them. I have recorded our rain in Moonshine Valley for the last 34 years and although the annual rainfall has continued as normal, the sudden and incredibly heavy rain events over very short periods of time have increased in frequency. These intense rain events are now so damaging this is a really dangerous idea. I just do not understand why this obvious re-siting has been reversed back to the original plan and I urge a rethink of this.

(We note the detention ponds placed in the original plan on the edge of slopes have been moved further in following our concern about overflowing down the slopes in the intense rain events, and this is good. These, plus raingardens, will certainly help mitigate any detrimental effects on waterways and slopes from the use and development on the promontaries.)

We support the recommendation of Mr Hudson to have a minimum 15m setback of dwellings from the common boundaries with Moonshine Valley properties which will give a further area for water to soak into the ground before it reaches the slopes, BUT Council must make sure the permeable surface of each property abides by the regulations of 40% minimum permeable area for suburban areas and 25% minimum permeable area for medium density. Sadly there is little, if any, monitoring

of required permeable areas in many of the properties in the subdivisions adjacent to the gullies I work in, with a number of non-complying sites.

We also support the recommendation of Mr Hudson for the removal of the prescriptive requirement of three storey medium density housing above Moonshine Valley, and recommends that the buildings are no higher than 9 m. This, plus the 15m setback, will help to reduce the visual impact of this development on the Moonshine Valley properties. Moonshine Valley has been regarded as a Special Character area (PNCC District Plan, Hudson 2023 Attachment #3 1996) and with all our biodiversity we feel very strongly that we must do everything we can to protect it. It has been regarded as a unique subdivision in the city and it would be a dreadful step to degrade it.

We applaud the desire for Council to develop an overall Plan for the Aokautere region which is environmentally sensitive, and to prevent more ad hoc developments, but there are serious problems to solve before this can take effect. Protecting the unique topography of the region and the ecological importance of the gully system by rezoning the gullies to Conservation and Amenity is a wonderful legacy to leave for future generations living in Palmerston North. Green corridors connecting Moonshine Valley across to Turitea Valley and beyond will create an important enclave of biodiversity in the region with its birds and aquatic life, as well as creating a recreational network second to none in New Zealand.

We ask that Council ensure ALL discharge of stormwater mitigation is undertaken before any development commences and, in addition, control earthworks by developers to prevent damage to the slopes of both Moonshine Valley properties and the gully walls. This dumping of soil has happened in all the gullies in the Aokautere/Summerhill area to date but must be stopped. Damage from this illegal infilling does huge harm not only to the regenerating natives and plant cover of the slopes but degrades the streams and water quality of the tributaries into the Manawatu.

To illustrate the support of the residents of Moonshine Valley the following points arising from the reports of Ms Copplestone (S42A-Planning), Mr Hudson (S42A-Landscape) and Dr Forbes(S42A-Ecology) were put to them:

For the promontories immediately above Moonshine Valley

1. The 15m setback
2. The removal of the medium density housing prescription
3. A reduced height limit to 9m...
4. Retain the proposed swales in Council ownership
5. Preserve established native growth on gully slopes from excess earthworks.

The 62 signatories show the overwhelming support of the Moonshine Valley residents. I am not going to read the names, but they are attached to this written document.

Thank you

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My name is Anthony Gear, married to Rosemary, and I am a retired Rheumatologist.

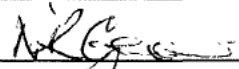
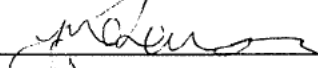
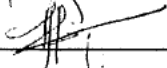

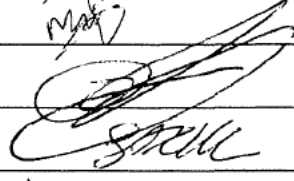
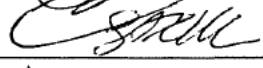
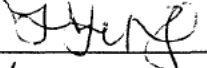
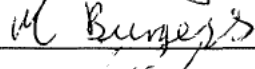
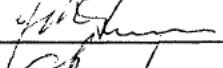
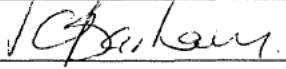

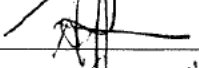

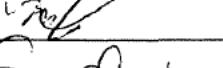


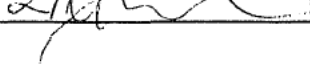
I endorse everything that Rosemary has said. I just want to make one more point about our concerns about the threat of the increased heavy rain run-off from the gullies, all flowing into the Moonshine Valley stream. This stream becomes a torrent before flowing under Bryant's Bridge on Aokautere Drive (SH57) at the bottom of the Aokautere hill. With Hawkes Bay's recent experiences, I don't believe one needs to be a hydrologist to recognise the potential threat that increased flow under the bridge poses to this important arterial route.

Thank you.

We the undersigned residents of Moonshine Valley, Aokautere, endorse Mrs Coplestones report (S42A-Planning) and the following recommendations of Mr Hudson (S42A-Landscape) and Dr Forbes (S42A-Ecology) put before the Hearing Panel for Aokautere Plan Change G:

For the promontories immediately above Moonshine Valley.

1. The 15m setback.
2. The removal of the medium density housing prescription.
3. A reduced height limit to 9m.
4. Retain the proposed swales in Council ownership.
5. Preserve established native growth on gully slopes from excess earthworks.

NAME	ADDRESS	SIGNATURE
Rosemary Gee	Moonshine Valley	
Marie Thompson	Moonshine Valley Rd	
Nelka Mohan	Moonshine Valley Rd	
Mohan Marjose	Moonshine Valley Rd	
Mitchell Hull	Moonshine Valley Rd	
Glen Gille	Moonshine Valley Road	
Tracey Hung	Whisky Way	
Mitchell Burgess	Moonshine Valley	
Fred Stevens	Moonshine Valley	
Cath BARKHAM	Moonshine Valley Rd	
Gillian Allen	Moonshine valley Rd	
Steve Tennant	Moonshine Valley Rd	
Sara Burgess	Moonshine Valley Rd	
Matt Posing	Moonshine Valley Rd	
SARAH GOLDING	MOONSHINE VALLEY RD	
Rebecca Golding	moonshine valley rd	
Jew Thompson	Moonshine Valley Rd	

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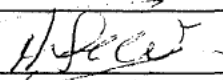
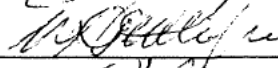


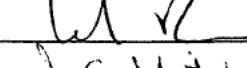
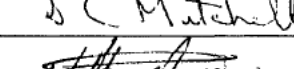
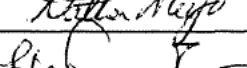
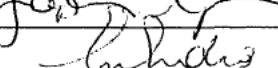
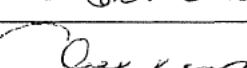
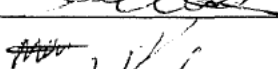

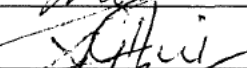
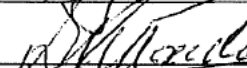
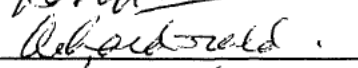
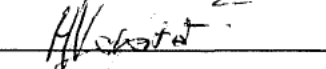

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NAME	ADDRESS	SIGNATURE
Drewt Conthickie	7(2)(a) Privacy Moonshine Valley Rd	[Signature]
SARAH LEBELMAN	7(2)(a) Privacy Moonshine Valley Road	[Signature]
Kery Shippam	7(2)(a) Privacy Moonshine Valley Road	[Signature]
Volker Schroeter	7(2)(a) Privacy MOONSHINE VALLEY ROAD	[Signature]
Gina Champinickul	7(2)(a) Privacy Moonshine Valley Road	[Signature]
Mark Kenny	7(2)(a) Privacy Moonshine Vly Rd	[Signature]
Janne Kenny	7(2)(a) Privacy Moonshine Vly Rd	[Signature]
Jaylene Tiffen	7(2)(a) Privacy MOONSHINE Vly Rd	[Signature]
Heath Tiffen	7(2)(a) Privacy moonshine valley rd	[Signature]
Courtney Tiffen	7(2)(a) Privacy moonshine valley rd	[Signature]
Frances Guthrie	7(2)(a) Privacy Moonshine Valley Road	[Signature]
Lisa Hunter	7(2)(a) Privacy Moonshine Valley Rd	[Signature]
Rogan Hunter	7(2)(a) Privacy Moonshine Valley Rd	[Signature]
Sonya Park	7(2)(a) Privacy Moonshine Valley Rd	[Signature]
KERRY PARK	7(2)(a) Privacy MOONSHINE VALLEY RD	[Signature]
Wendy Bruce	7(2)(a) Privacy Moonshine Valley Rd	[Signature]
Susan Young	7(2)(a) Privacy Moonshine Valley Rd	[Signature]

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NAME	ADDRESS	SIGNATURE
Anthony Gear	Moonshine Valley rd.	
Wynne Adams	7(2)(a) Privacy Moonshine Valley Road	
Bethina Phillips	7(2)(a) Privacy Moonshine Valley Road	
Jeremy Yang	7(2)(a) Privacy Whiskey Way	
Colin Perrin	7(2)(a) Privacy Moonshine Valley Road	
Sue Mitchell	7(2)(a) Privacy Moonshine Valley Rd.	
NATHAN MEYER	7(2)(a) Privacy MOONSHINE VALLEY RD.	
Stephanie Meyer	7(2)(a) Privacy Moonshine Valley Rd	
Lia Endres	7(2)(a) Privacy Moonshine Valley Rd	
Charlotte Harrison	7(2)(a) Privacy Whisky way	
Mercedes Harrison	7(2)(a) Privacy Whisky Way	
Bethrick REEDY	7(2)(a) Privacy Moonshine Valley	
Suzanne Hill	" " "	
Barrie Macdonald	7(2)(a) Privacy Moonshine Valley Rd	
Maniwen Macdonald	7(2)(a) Privacy Moonshine Valley Rd	
Hannelize Forster	7(2)(a) Privacy Whisky Way	
ERIC MENTON	7(2)(a) Privacy WHISKY WAY	