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Aggregate & QUARRY ASSOCIATION OF NZ

Building new ditches and ditching old approaches

he scale of what unfolded here in Auckland and the wider North Island in late January was of biblical proportions. I can only hope all AQA members have come through without too much personal loss or devastation.

Quarries will very much be the providers of most of the foundations of the necessary rebuilding and recovery.

I thank our CEO Wayne Scott for spending most of January crafting the AQA's response to the Government's RMA reforms, most especially as he is rightly now advocating these be ditched in their entirety. (See story page 2).

We very clearly need fast-track legislation across the board, not as a one-off for special projects. It must apply nationally – every region has already had a taste of what adverse weather events means and we all still face further devastation.

That means building better as well as building fast.

This came to mind reflecting on a

presentation at last November's excellent Future Roads Conference by Jamie Egan, National Pavements Manager for Acciona in Australia. (Another being held this November, again in Hamilton.)

He said NSW data showed only 0.5 percent of concrete roading slabs needed replacing every decade, they didn't need resurfacing every 10 years and don't rut or pothole after rain events. He also found it bizarre our roads don't have shoulders.

Currently, we don't fund durable infrastructure like concrete roads. I believe we must start looking at such options. These may not be feasible in lower population areas like the East Coast but after six washouts on its roading network in a year, surely we can provide better ditches and shoulders rather than just patching it up each time?

A whole new and enduring paradigm is now necessary. Certainly, newish PM Chris Hipkins must ensure the RMA reforms are ditched and with it, the mad plan to ban any extraction anywhere on the DOC





estate. (see story page 2). That would severely impact the current ability of quarries in several regions to continue accessing alluvial deposits to be used, not least, on flood reconstruction.

The ban would also lock up the estimated third of the nation's rock resources which sit on the wider DOC estate. No one wants to extract rock from National Parks, but there are parts of the conservation estate that have less 'conservation' values than my backyard.

Certainly, we will have plenty to talk about at our July QuarryNZ conference, which this year will include 30 or more international quarrying representatives. (See story page 5).

Meanwhile, it's great to see a story in this magazine (Aggregate News) about an alluvial gold mine; fascinating to read about the operation and its equipment and a long way from the gold panning I did on the West Coast during my Christmas break.

I am also delighted to see the winners announced in the Komatsu Women in Extractives event. Our industry needs to celebrate all who work in our operations and women have for too long been unheralded contributors.

Hope to see you all in Christchurch in July

Jayden Ellis Chair, AQA



Ditch the RMA reforms and go fast track

In late January/February as the rain began to fall in Auckland and beyond, AQA CEO Wayne Scott lodged the AQA's submission to the Government's reforms of the Resource Management Act.

fter the devastation that Cyclone Gabrielle brought, he wants the Government to axe the 'reforms'. "The scale of what we have seen – and the very real risks under climate change of more to come – makes it

imperative we very rapidly implement a whole new approach to resource consenting," he says.

Hundreds of roads like the one above near Dartmoor, Hawkes Bay need urgent repair

"We must have legislation that allows infrastructure and homes to be built or repaired much more quickly – and in a resilient way so we're not back in two years doing it again."

What the AQA had submitted on envisaged an improved approach to consenting which was still way too complex.

Wayne Scott liked Environment Minister Parker's move to having 15 local committees to sort out consenting on a regional basis.

"That's much better than the current 78 councils. David Parker also refused to implement the top-down model of cogovernance envisaged in the Three Waters 'reforms' – allowing each region to decide its own model of iwi representation."

But he says the key RMA reform – the Natural & Built Environment Bill – would have protected the environment, irrespective of the economic implications.

"Such a blanket approach was not appropriate before February's floods; it certainly can't work if communities want to be rebuilt relatively quickly with resilient infrastructure which protects them against future such events."

Quarries will be central to the repair and rebuild efforts and resource consent processes which stretch into years – even with

supportive councils - won't wash for New Zealanders, says Wayne.

"We will need, for example, more quarries close to coastal areas which can provide the armour rock for seawalls as well as the aggregate and sand for homes and roads."

The Government needed to adopt a whole set of fast-track consenting processes which can see new quarries approved in a matter of months.

Local residents, who used to often fight quarries, may now lead the charge on getting things approved asap because their homes will benefit. Local quarries were quickly able to get consents and gear up production to help rebuild Christchurch after the devastating 2010-11 earthquakes.

"Yes, some residents living nearby felt impacts, but it meant thousands of new homes and many kilometres of road and infrastructure were built and repaired in rapid fashion," says Wayne.

"We now need that sense of urgency across the rest of the country. Every region is feeling climate change's impacts and Government and councils need to build durable infrastructure in the best locations at speed."

The quarry industry would not look for carte blanche and good environmental outcomes can still be expected in fast-track consenting processes, says Wayne.

"But status quo scenarios are no longer possible and many previous no-goes will have to be considered for the greater good."

The AQA has offered to work with Government Ministers and agencies to help rapidly develop necessary and workable fast-track procedures.



There's a gold rush going on in the West Coast – and it's been going on a while.

ndrew Birchfield operates an open cast gold mine just a few hundred metres from Lake lanthe near Ross. When he started 11 years ago at the mine, an ounce of gold was worth around \$1,500; now it's nudging \$3,000.

He says gold appreciates when there's uncertainties around the world.

AQA and MinEx CEO Wayne Scott says about five years ago there were 35 active open cast gold mines in New Zealand, all in the South Island, most on the West Coast. As the price rose further under Covid, and then spiked again with Russia's invasion of Ukraine, so did the number of gold mines; now there are more than 50 active mines.

Andrew acknowledges the price rise has meant some good years for his business – BRM Developments, but says it isn't an easy life.

He is the fourth to operate the Lake lanthe mining site. "It was really challenging climate for all the other ones with large rocks to deal with and lower gold prices."

After digging test holes he tried using a 50 tonne digger to extract material but encountering boulders sometimes the size of cars saw him upgrade to 120 tonne machines.

The excavators and dump trucks he now operates are as close in size you'll likely see on the West Coast to the giant machinery used in some Australian mines.

The gold is present because a glacier came down the nearby Wanganui River valley bringing the precious metal with it. Not that you get "Hallelujah" moments at the BRM site – the gold is mostly in fines (flakes) and the biggest nugget (a one-off) – was about the width of a 20cent piece.

The 280 hectare site is operated under a permit from Ngai Tahu who inspect as often as two to three times a year as well as bring visitors. Only



Mining is in Andrew Birchfield's blood.

around 40ha has been disturbed and that includes roads, ponds and open areas as well as the pits which are refilled after mining concludes.

The BRM mine only works five days a week (security on site all the time) but they are long days, digging into pits as deep as 30 metres and processing 1100 cubic metres of material a day.

This is put through a recovery process where vibration and water sluicing removes everything but the gold.

Andrew is naturally reluctant to say how much gold is produced in an average day but he says it has a recovery rate sufficient to keep him and his 10 staff employed. His Assistant Manager is Ruby Johnston, still in her early 30s who reportedly topped her class in the oral exam required to get an A Grade Certificate of Competence (CoC) which allows you to manage a mine.

"Ruby runs a top ship when I'm not here," says Andrew.

She's a West Coast woman whose family has been involved in forestry, fishing and mining. Andrew's daughter Samantha also has her CoC and like her brother Steffan has worked at the mine before pursuing other careers.



The machinery is big at the BRM site. At right: Staff safety a major focus for Assistant Manager Ruby Johnston.

"I wouldn't want my kids to take this on at the moment with the challenges in the industry," says Andrew who's on site most days and doing long hours with his staff. He started mining for his father Evan at age 16 and it's clearly in the blood.

The BRM mine once employed 20 staff and operated six days, but a change in direction and bigger machinery has seen this half.

As well as managing the site, Ruby and Andrew also fill in on any other jobs that need doing during the day including operating the excavator, trucks, loaders, haulers and feeding screen.

"It's preferable to be out there working with the staff rather than being stuck in the office," says Andrew.

Ruby's tasks include health and safety performance and she says quite often she's catching up with paperwork at weekends.

"Our main focus is keeping our staff safe."

Wayne Scott, who was on the Lake lanthe visit, says it's a mine that performs well on health & safety and environmental management.

"Andy and Ruby pay a lot of attention to supervision, training and running well maintained equipment, which are essential elements of keeping their workers safe."

It's certainly not without its challenges. The area receives four to five metres of rainfall annually, often in deluges like one on Waitangi Day which caused flooding and slips in the area. Andrew opened up part of the site to give road crews somewhere to dump material. Some of the big rocks extracted from BRM's operations go into flood control protection work in Westland.

The price of gold has pushed some mines like BRM's into Tier One reporting requirements for the Crown agency NZ Petroleum & Minerals. It's also created a rush of mining permit applications – currently 280.

"Everyone wants to be a gold miner now," says Wayne. Andrew Birchfield agrees. "Right at the end of the article put down this mine is for sale. Just joking," he laughs.



AQA works for the quarry industry – join us today

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Go to QuarryNZ and GAIN

There's a real bonus at this year's QuarryNZ conference.

AQA CEO Wayne Scott is hosting more than 60 international quarrying representatives in Queenstown earlier that same week, and says over half of them will flow on to Christchurch.

ayne represents the AQA at GAIN – the Global Aggregates Information Network – which meets virtually on a regular basis and every two years in one of the member countries across Europe, Asia, the Americas, Africa and Australasia.

"We were thrilled that GAIN agreed to our proposal to hold the 2023 meeting in Queenstown," he says "What's even more pleasing is many of them want to meet more New Zealand quarry people – and three of them are speaking at QuarryNZ."

This includes both the President of the UEPG (European Aggregates Association) Antonis Antoniou Latouros and its Secretary General Dirk Fincke.

"Both these men are right across all the issues facing quarries in Europe including the growing requirements for sustainability and the need for quarries to meet climate change demands. These are real issues for us now in New Zealand."

GAIN's Convenor, Jim O'Brien, will also speak in Christchurch on international production and trends.

Conference organiser Melissa Bahler says there are already more trade stands booked than the 67 taken at the 2022 conference in New Plymouth and she's expecting to attract about 30 more.

She adds the conference venue is world-class with everything able to be accommodated on one site for the July 5-7 annual event.

Another bonus is the five hotels lined up for conference attendees are all within easy walking distance.

Melissa also recommends that people book their accommodation at the same time as registering for QuarryNZ. Early Bird registrations are available until the end of May, but she says they have been coming in thick and fast in recent weeks.

As usual there is a Partner's Programme which includes a trip on the gondola to the top of the Port Hills followed by lunch in the quaint settlement of Akaroa.

Partners will however be back in time for the famous Real Steel Happy Hour(s) which precedes the free evening on the Thursday night, allowing everyone to sample some of Christchurch's hospitality venues.

Many people are likely to stroll along the rebuilt Oxford strip that hosts multiple restaurants and bars alongside the Avon River.

"I think this will be a truly memorably conference and look forward to catching up with many of you," says Wayne. **AQA**



Skye Knox, sister of the late Kristy Christensen, accepted the award in Kristy's name, given to mark her pioneering work for diversity and inclusion in extractive sector workplaces. Skye is pictured with MinEx & AQA CEO Wayne Scott.

Women in extractives sector recognised

Internationally recognised environmental work and an ability to roll up the sleeves and do any job while mentoring others, marked the winners of new awards by the extractives industry.

elebrating diversity and inclusion, Straterra, AQA and MinEx hosted their first Women in Extractives lunch and awards ceremony in Christchurch in March, sponsored by Komatsu New Zealand.

Allanah Toko-Mikahere, from Winstone Aggregates in Hawke's Bay was named Hanga-Aro-Rau Workforce Development Council Leader of the Year. Allanah is the supervisor of a mainly male crew at Roy's Hill Quarry has become proficient at all tasks in the quarry – responsible for mentoring and employment of local young people at the quarry.

Stephanie Hayton from OceanaGold received the MITO-Te Pukenga Emerging Star award for her environmental work for the gold mining company, as well as showing exceptional skill, leadership, and adaptability in her work.

Her achievements in researching the concept of a passive water treatment system as part of a mine rehabilitation has been recognised around the world. Her current work on Archey's Frog and the biodiversity of the Waihi North Project is seen as a potential game changer.

"Hosting our first Women in Extractives event and seeing how many excellent women were nominated for these awards has been a positive moment in our industry," says AQA and MinEx CEO Wayne Scott.

"For me personally, it was an honour to award the Kristy Christensen Memorial Award (sponsored by MinEx) to Kristy Christensen posthumously in recognition of her valued contribution to diversity and inclusion in the industry. Kristy's enthusiasm, work ethic and big smile were contagious and she never left you in any doubt about what she thought, leading to some interesting MinEx Board meetings," says Wayne.

Straterra CEO Josie Vidal say there was a real depth of talent in the nominations for these awards. "This was great to see – the extractives industry is certainly in good hands."

Josie and Wayne acknowledged the other finalists for the awards – Luana Misa from Winstone Aggregates and Molly Davidson from Road Metals for the Emerging Star award, and Samantha Muir from OceanaGold and Karyn Payne from J Swap Contractors for the Leader of the Year award.

Luana is a member of the Otaika Quarry team in Northland and she has influenced the culture at the site significantly by uniting the team behind worthy causes including mental health, wellbeing and connection.

Molly got her first taste of quarrying through MITO's RockUp programme while at Rolleston College in Canterbury. She has progressed from dump truck operator, to site water management and now to running the chip plant at Rolleston Quarry.

Samantha has been proactive in encouraging university students across New Zealand to consider technical roles at OceanaGold. She was nominated by her team for her caring attitude towards others.

Karyn, based in the Waikato, works with a predominantly longserving male workforce. Her empathy, helpful nature and strong communication skills have enabled her to initiate real change in health and safety performance. AQA

AQA Technical update

National Pavements Technical Group

- AQA is working on two subgroups with NPTG at present research opportunities and dissemination of technical information
- Research opportunities are up to 30 items now and counting.
- The dissemination of information group is aiming for the New Zealand Institute of Highway Technology (NZIHT) conference, being held in Taranaki in May, to form a panel session and have a guest speaker.

AQA Technical Committee meeting

- The first meeting for 2023 was due to be held in Tauranga in late February.
- Focus issues were M/4 specification working group, manufactured sand research and quarry products training development.
- A survey on technical focus areas to help us be more intentional in the way we help our members was in the February edition of the AQA newsletter, From the Quarry Face.

Production Statistics

- AQA has summarised the production statistics including the 2021 data into a pdf document. For a copy, contact tech@aqa.org.nz
- AQA's corrected figures for aggregate production in 2021 were in the low-mid 40 million tonnes range – or about 8 tonnes per capita.

• 2022 production figures are due to be submitted in March. If you would like assistance, please contact AQA - see below.

Technical help

• AQA immediately received three requests for technical help after an article promoting this service to members was published in the previous Aggregate News. As AQA members you are able to contact our Technical Adviser Mike Chilton for some free advice on any production, consent or other technical issue.

Mike is available at tech@aga.org.nz or 021 594 225. AQA CEO Wayne Scott is also able to be contacted if you would like someone in the industry to be your mentor. Contact Wayne on wayne@aqa.org.nz or 021 944 336

Quarry Products Training Package

- AQA applied to the Inspiring Futures Foundation (established by MITO) for a grant to develop a training package for quarry products but to date has been unsuccessful.
- It intends to reapply in the next round of funding in March to develop training which would consist of a one-day short course of interactive tutorials, some short videos on products and quality assurance checks and a five-day block course, focused on aggregate processing and quality assurance. AOA

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