## Plastics buildup is close to home

## By Andrew Caddie

The Marlborough Sounds are the jewel of our region. They're where we and our visitors live, play, work, and eat. Special for many reasons, the Sounds are about 20 per cent of New Zealand's coastline, all here in our district.

Plastic waste buildup on beaches is not just a problem in Asia or other faraway places. We have our own problems here – and we need to do something about it.

In Clova Bay, residents and friends have been working on this problem for the past four years, prompted by a former resident and her children.

They started with a beach cleanup in 2020, which found a significant problem – not just large mussel ropes and buoys on the beach but many frayed plastic knots in differing degrees of degradation, tangled amongst the sand, reeds and driftwod.

Marine farms, and in particular mussl farms, occupy some 3000 hectares in the Marlborough Sounds. The growing structures are plastic intensive and inevitably plastic debris and litter from these operations ends up in the water.

Since 2020, local community members have run a citizen science project that formally monitors litter accumulation in a test plot at the head of Clova Bay with Sustainable Coastlines. Using set protocols, locals collect, sort, measure and then record the rubbish collected on the Sustainable Coastlines Litter Intelligence Website, accessible for all to view.

The audits so far have found around 80 prcent of the visible litter collected was aquaculture plastic discharge - mussel buoys, ropes, multiple frayed knots and fibres which come from the mussel farm structures.

It is well-known that plastic pollution is a world-wide problem with a large amount of plastic in waterways and marine environment coming from many sources. However, the situation is more than a little different here. As can be seen the local monitoring, up to 80 per cent of plastic in Clova Bay is identified as industrial marine farm discharge.

Marine farmers are aware of this plastic debris issue and appear to be taking some steps to contain the debris. But clearly this is not enough nor are these efforts well targeted. These ongoing discharges are unacceptable.

There is world-wide concern about plastic in the environment and the effect on life and organisms. A 2020 study from Exeter University, UK showed that nanoplastics had caused deformity in developing sea urchins. Recent results from research in the Hauraki Gulf have shown nano-plastics in flounder and snapper, both in their gut and muscle tissue.

Local community groups took this evidence to the Hearing Panel for the Marlborough Environment Plan (**MEP**).

The Hearing Panel agreed it was appropriate for marine farms to be operated to avoid the loss of non-biodgradable (eg plastics) debris and litter and any associated adverse effects. The Hearing Panel agreed with submitters that the loss of non-organic waste is preventable. The Hearing Panel introduced specific policies and provisons into the MEP to attempt to control the the loss of non biodegradable debris from marine farming operations.

This is a good start, but we need our regulators, in this case the Marlborough District Council, to take this issue seriously. They need to vigorously defend the new MEP policies from industry pushback and then work intensively and promptly with the aquaculture industry to stop this stream of plastics getting into our clean green marine environment.

It's in the industry's best interests too.

• Andrew Caddie is the chairman of the Kenepuru and Central Sounds Residents' Association.