



Sustainable Salmon Fact Sheet

The impacts of intensive salmon farming

- There is consensus in the international scientific literature: industrial scale fish farming in open pens damages the marine environment.
- The level of damage done depends on the amount of fish grown and the sites ability to process the waste created – which in open pen systems is not captured, but released into the ocean.
- This waste includes tonnes of fish poo, uneaten food and organic matter from net cleaning.
- If the site doesn't have enough wave energy to flush this waste – it builds up in mounds under the pens and enters the water column.
- This changes the chemistry of sediment on the seabed, reducing oxygen levels and releasing methane and toxic hydrogen sulphide. This can harm fish, marine invertebrates and other organisms.
- In the water column, dissolved waste can alter phytoplankton, increasing the risk of toxic algal blooms.

This is happening in Tasmania

- Tassal's largest lease in Macquarie Harbour is what fish farm experts call a 'dead zone'.
- The latest report by the Institute of Marine and Antarctic Studies shows that all marine life is dead under the lease, because oxygen levels have dropped so low.
- Huon Aquaculture recently released evidence that the dead zone has spread from Tassal's lease into the Tasmanian Wilderness World Heritage Area, where there has been a 97.27 per cent reduction in marine life.
- The Tasmanian Government knew about Tassal's dead zone in November last year. But they have let Tassal continue to operate, even though they are breaching regulations, until April this year.
- This year Tassal are planning to open another industrial salmon farm at Okehampton Bay, prime recreational fishing and tourism country on our near-pristine east coast. Okehampton Bay has warmer water temperature during summer than is healthy for salmon. Water currents in the Bay aren't strong enough to properly flush the approximately 920 tonnes of fish poo per year that will be released and experts have warned there could be fish kills and environmental damage at the site.
- Despite this, Tassal continues to promote itself as sustainable and the global environment group WWF still allows Tassal to put its panda logo on their product, even when it is coming

out of a marine dead zone. Tassal have paid WWF up to half a million dollars a year for this privilege.

The Solution is simple

- There are simple solutions, which prevent this damage from occurring but still let the industry thrive.
- Land-based salmon farming – like the type Tasmanian company 41 Degrees South does, captures the waste produced, rather than releasing it into the ocean. All Tasmanian salmon farming companies already grow their smolt in land-based tanks.
- The second alternative is siting salmon farms further offshore in higher wave energy environments. This wave energy helps ‘flush’ the waste – so that it doesn’t build up in mounds under the pens.
- Tassal and some old-fashioned politicians have said these changes would ‘shut the industry down’ and cost jobs. But Tasmania’s second biggest salmon producer, Huon Aquaculture, has already committed that its future developments will be ‘offshore’.
- There are just as many jobs in offshore operations – Tassal just needs to reinvest some of their profit in new infrastructure.
- If Tassal, like Huon, are prepared to do this, we will have a win-win situation, where jobs are protected and damage to our marine environment is minimised.

For more information or to take action to support a truly sustainable salmon industry, visit http://www.et.org.au/wwf_wtf.