

Kaikōura Pāua Fishery Consultation Submission Part 2

1. **The KBRFC supports fine scale spatial management** that allows fishing in medium to low uplift areas but keeps the few areas with poor recovery closed until they show adequate improvement. This was recommended in the 2021 Fisheries Assessment Document⁵ and we believe it would be a more equitable and targeted form of protection than the extreme proposal to permanently halve the recreational daily bag limit over the entire Kaikōura Marine Area (Figure 3).
2. **The KBRFC supports reopening the kina fishery** to ensure that the potential ecological effects of fishing on large crayfish and large finfish that eat kina are kept in balance by continuing to remove kina at a similar harvest rate to their predators. This may help to reduce or avoid the development and proliferation of kina barrens in the Kaikōura Marine Area.
3. **The KBRFC supports an independent recreational fishing survey of the Kaikōura Marine Management Area to estimate the recreational pāua catch.** Local scale information on the take of pāua from both commercial and recreational fishers will be needed as part of determining if the level of harvest is sustainable. It will be particularly important to estimate the recreational catch both at the reopening and beyond as the recreational harvest estimate in the first year may not be at the long-term average level going forward.

The Fisheries NZ Marine Amateur Fisheries Working Group has identified significant issues and bias with recreational fisher self-reporting apps when used for reporting of recreational catch as recommended by the Kaikōura Marine Guardians. Reliable recreational harvest estimates with confidence intervals are only achievable through independent scientific recreational fishing surveys with known sample frames and methods approved by Fisheries NZ and reviewed by the Marine Amateur Fisheries Working Group prior to being used for fisheries management purposes.

Figure 1. PAU 3 (Canterbury/Kaikōura) and PAU 7 (Marlborough) QMAs overlap the area currently closed to all shellfish and seaweed harvesting under section 11 of the Fisheries Act 1996. The pie graph below shows the 2019/2020 catch allocations for each sector of PAU 3 and PAU 7 combined.

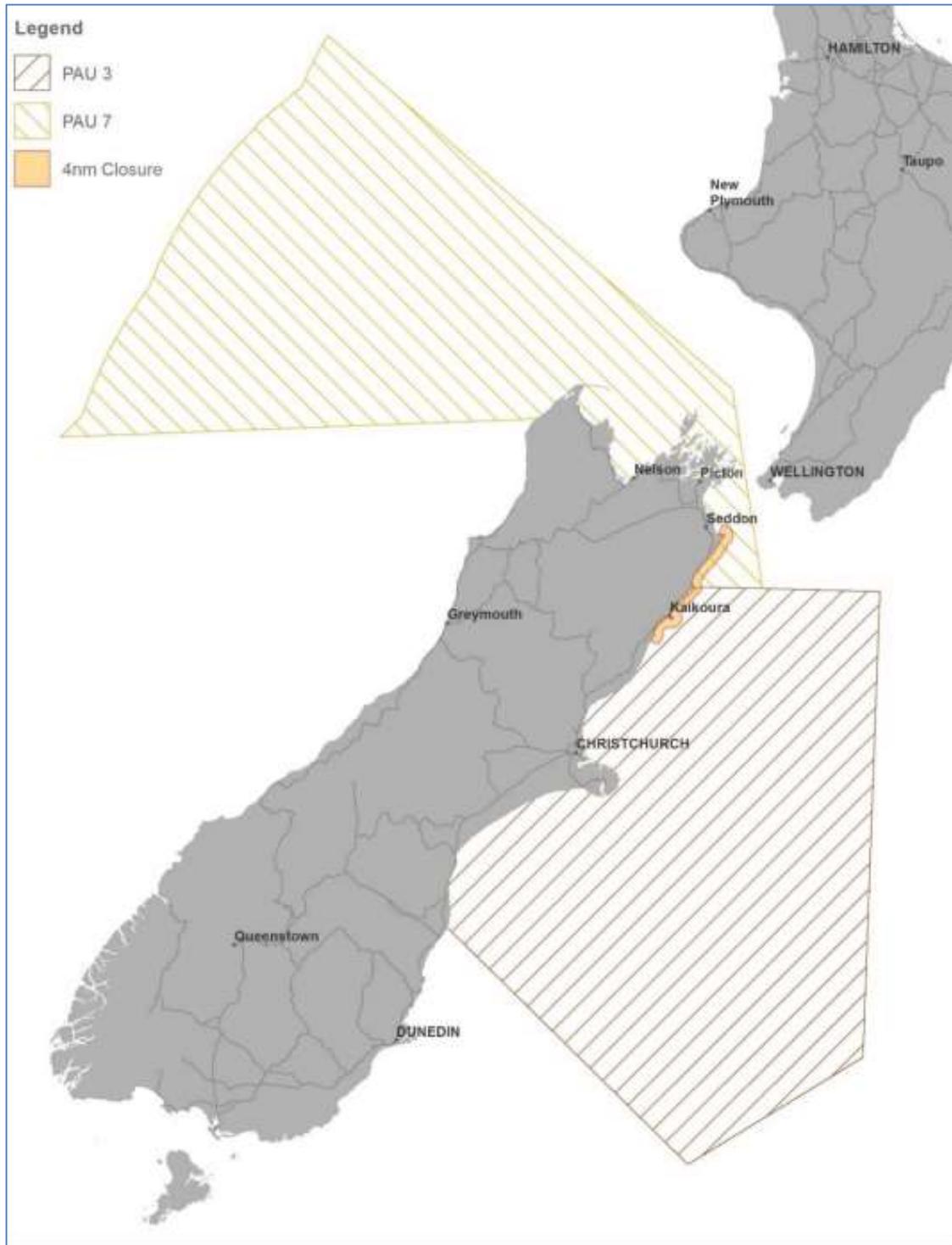


Figure 2. Marginal trend (relative to a geometric mean of 1) in biomass per unit effort (BPUE) across survey years from the BPUE model after accounting for confounding variables. Error bars show 95% confidence intervals. From Figure 5 in McCowan and Neubauer (2021).

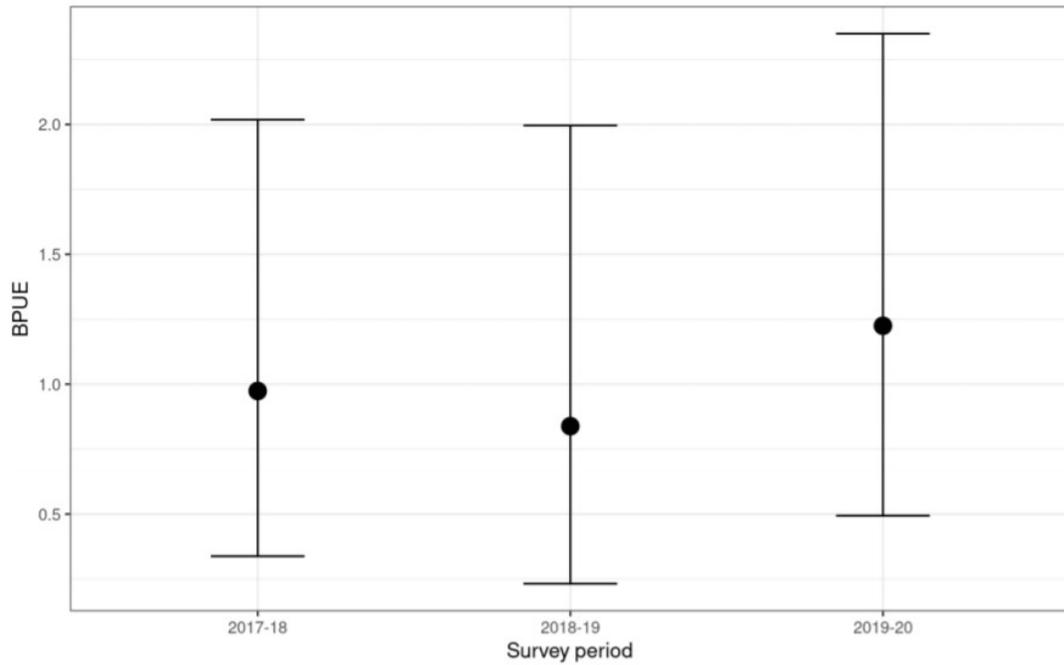


Figure 3. Map of the Kaikōura Marine Management Area and earthquake-affected area closed to seaweed and shellfish fisheries under section 11 of the Fisheries Act 1996.

