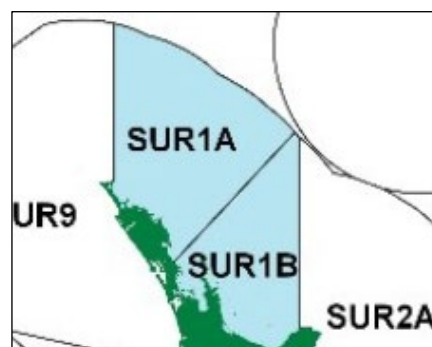


Review of Kina (SUR 1A, SUR 1B) – East Northland & Hauraki Gulf and Bay of Plenty

A summary of issues for the New Zealand Sport Fishing Council

June 2023

Fisheries New Zealand (FNZ) is reviewing the [sustainability measures for kina](#) in Quota Management Areas (QMAs) SUR 1A and SUR 1B. Submissions are due by 17 July 2023. Your feedback is most welcome by 10 July. Please email Sydney Curtis at sydney@legasea.co.nz or Trish Rea at trish@legasea.co.nz.



Commercial catch limits for kina within these stocks have been fully or over-caught under the current settings. Information from fishers, scientists, and other stakeholders (including through local area surveys) suggests kina abundance is high in many areas to the point where kina are having an impact on other species and the wider marine ecosystem

Kina 1A and 1B

Main Points of interest:

1. Analysis of fine scale catch and fishing effort data suggests the majority of commercial fishing occurs at offshore islands and isolated coastal regions, and generally does not overlap with local non-commercial fisheries or customary management areas.
2. Three options are proposed for each of the SUR 1A and SUR 1B stocks, as outlined in Table 1 below. Options 2 and 3 for SUR 1A and SUR 1B provide for a modest increase to the Total Allowable Catch (TAC) and are considered to be a cautious approach when considering the likely overall biomass of kina within the QMAs.

Table 1: Proposed management options (in tonnes) for SUR 1A and SUR 1B from 1 October 2023.

Stock	Option	TAC	TACC	Allowances		
				Customary Māori	Recreational	All other mortality caused by fishing
SUR 1A	Option 1 (Status quo)	172	40	65	65	2
	Option 2	247 (↑ 75 t)	80 (↑ 40 t)	100 (↑ 35 t)	65	2
	Option 3	267 (↑ 95 t)	100 (↑ 60 t)	100 (↑ 35 t)	65	2
SUR 1B	Option 1 (Status quo)	324	140	90	90	4
	Option 2	439 (↑ 115 t)	210 (↑ 70 t)	135 (↑ 45 t)	90	4
	Option 3	509 (↑ 185 t)	280 (↑ 140 t)	135 (↑ 45 t)	90	4

3. SUR 1A and SUR 1B are recognised as target fisheries where commercial harvesting is conducted through hand gathering, while freediving. The selective nature of this method of harvesting ensures that there is no bycatch or incidental mortality of kina or non-target organisms.

4. Harvesting of kina may lead to an increase in the abundance of macroalgal and invertebrate species and a corresponding increase in associated biodiversity.
5. The removal of predators (particularly large predators) through fishing, and the occurrence of kina barrens as a result, will have an impact on associated biodiversity. The full extent of this impact is unknown (including on associated and dependent species), but it is likely that a shift from productive kelp forests to kina barrens will result in reduced primary production and biodiversity.
6. Kina barrens in north-eastern New Zealand are also caused by the long-spined sea urchin (*Centrostephanus rodgersii*). These are not encompassed within the Quota Management System (**QMS**) framework and, therefore, does not have an allocated TAC or specific restrictions. However, fishers are required to possess a registered commercial license to commercially fish them and there is a requirement on them to report their catch of this species.
7. In March 2023, New Zealand Sport Fishing Council (**NZSFC**) representatives attended a National Workshop on kina barrens held to prioritise scientific research to inform management of kina barrens. Workshop attendees agreed that while kina removal can support kelp regrowth of macroalgae, it does not address the underlying causes of elevated sea urchin populations and is not a long-term solution for ecosystem recovery. Thus, any kelp recovery would be temporary unless broader ecosystem issues are addressed concurrently.

Recommendations for submission:

1. **NSZFC support a range of kina management measures** to include increased removals of kina, and to increase abundance of predator populations.
2. **Note** the reported advantages to “grooming” beds by reducing kina density that increases kelp cover and increases the size and condition of remaining kina.
3. **Support Option 3 for kina SUR 1A and 1B**, overall a 50% increase in the Total Allowable Commercial Catch (TACC) and a 34% increase in the Māori customary allowance.