Summary

South West Devon was the best performing region in the OHI+ assessment (69; Figure 1). The region received high scores for Economies, Designated Areas: Ecological Features, Mariculture, Tourism & Recreation and Artisanal Opportunities. The region's coastal habitats providing carbon storage benefits (56) were the only area to fall noticeably below the South West average (67), however the other habitats based sub-goals also scored slightly below average.

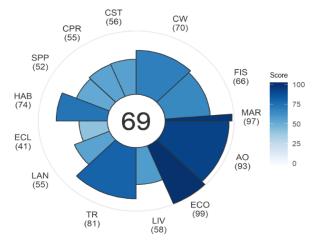


Figure 1. South West Devon goal [†] and central score.

High scoring goals and datasets

Ecological Features (ECL). A high proportion of coastal waters in South West Devon are designated for both cultural management and ecological conservation. With over 30% of the region's coastal area (1 km inshore to 12 nm offshore) within some form of relevant spatial designation, the Ecological Features subgoal scored highly (41) compared to South West average (21) (Figure 2). The score was influenced by two large sites; Start Point to Plymouth Sound and Eddystone SAC (249 km²) and Skerries Bank and Surrounds MCZ (341 km²). Further, a large proportion (53%) of the nearshore area (1 km inshore to 3 nm

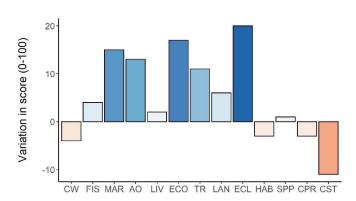


Figure 2. variation from the South West OHI+ central index score by goal. [†]CW (clean waters); FIS (fisheries), MAR (mariculture), AO (Artisanal Opportunities), ECO (Economy), LIV (Livelihoods), TR (Tourism), LAN (Landscapes), ECL (Ecological Features), HAB (Habitats), SPP (Species), CPR (Coastal Protection), CST (Carbon Storage).

offshore) was also classified in this assessment as being designated for management for human enjoyment or cultural value.

Artisanal Opportunities (AO). This goal captured the opportunities for small-scale fisheries, including the proportion of landings by under tenmetre vessels. The reference point for this dataset compares the region's current status against its recent (5 year) past due to a lack of suitable policy targets. The region experienced a consistent increase in the proportional of fisheries catch from under-ten metre vessels since 2015, and as such

scored highly. The region has the second lowest raw proportional catch attributed to the under ten fleet (2018; 19.1% of landings).

Economies (ECO). South West Devon was the only region to record stable Gross Value Added (GVA) per capita for marine-related industries (2011–2015). As such, economic productivity did not appear to follow the general negative trend for the South West (mean -6.7% decrease per year for other regions).

Low scoring goals and datasets

Carbon Storage. This sub-goal scored poorly for the region as less than half of SSSI sites identifying saltmarsh and mudflats as a designated feature were monitored within the last six years (as of 2018). Saltmarsh and mudflats within the Yealm Estuary SSSI were reported as being in particularly poor condition. Sites within the Tamar-Tavy and Salcombe to Kingsbridge Estuaries were assessed as more 'Favourable'.

Clean Water. This goal score was negatively impacted by an increase in water pollution associated with high vessel density. The region experienced the highest density of vessels (tracked by the global AIS system) of any South West UK region for four of five years of the assessment period (2014 -2018), with a peak weekly mean 1500 vessels per 4 km² in 2018. Most other regions in the assessment experienced approximately 500 per 4 km² per week.

Recommendations and limitation

Ecological Features. At present the OHI+ doesn't measure effectiveness or monitoring of marine protected areas due to a lack of data. There is a pressing need to develop a standardised and repeatable monitoring framework to measure the effectiveness of marine protected areas in the South West. This would provide future OHI+ assessments with a more robust measure of how regions utilise spatial management for marine conservation.

Habitats. A proxy of bottom towed fishing pressure was applied for the Habitats sub-goal due to the lack of survey data on benthic habitat condition. Without survey data to assess condition status (i.e. Favourable, Unfavourable), benthic condition was assessed relative to a region's past performance, with regions recording declines in trawl intensity receiving higher scores that those with increases. This method benefited South West Devon due to a decline in trawling over soft benthos between a maximum observed in 2016 and 2018. This metric however fails to account for South West Devon having some of the highest trawl intensity over its soft benthic habitats, with 10 hours effort per km² in 2018. Comparatively, the Isles of Scilly, with an average of 3 hours per km², recorded increases in trawling and was the lowest scoring region for soft benthic habitats. Collection of survey data at index or reference sites should be prioritised to provide a more detailed understanding of the condition of important benthic habitats and would improve certainty in the OHI+ scores for the *Biodiversity: Habitats* goal.

Table 1. South West Devon best (green) and worst (red) performing goals compared to the OHI+ central index score.

GOAL	STATUS	TREND	PRESS.	RES.	FUTURE	SCORE	SW SCORE	DIFF.
Ecological Feat.	30	1	79	92	52	41	21	20
Economies	98	0	41	58	100	99	82	17
Mariculture	94	1	81	81	100	97	82	15
Coastal Protection	64	-0.5	65	78	46	55	58	-3
Clean Waters	73	-0.1	100	92	66	70	74	-4
Carbon Storage	64	-0.5	54	78	48	56	67	-11