

OHI+ South West England: Isles of Scilly

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Summary

The Isles of Scilly (IOS-4) scored in 57 in in OHI+ assessment using data for the period 2014 - 2018 (Figure 1). The Isles of Scilly achieved low scores for Mariculture, Artisanal Opportunities and Economies when compared to the South West average (Figure 2). Three goals scored above the South West average (Figure 2), including fisheries, coastal protection and coastal systems. The region experienced a decline in status for many datasets used during the assessment period, resulting in a low overall score. These low scores were in part driven by the within-region benchmarking approach adopted by the assessment.

High scoring goals and datasets

Coastal Systems. The Isles of Scilly scored highly for both Coastal Systems sub-goals, which include habitats providing natural Coastal Protection (78) and Carbon Storage (85; Table 1). The Coastal Protection goal relies on habitat condition data relating to seagrass, sand dune and saltmarsh/mudflats, and implements a metric to penalise regions that fail to conduct regular (surveyed at least once every six

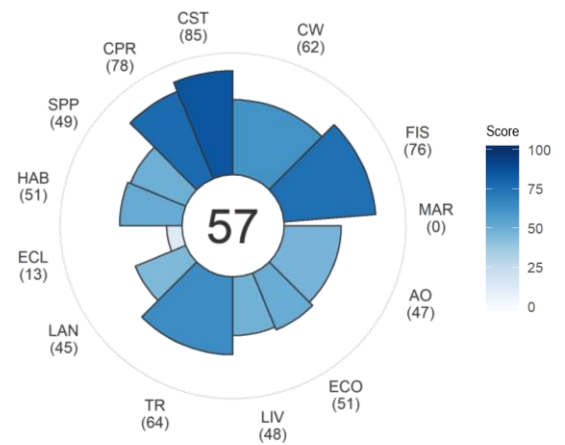


Figure 1. Isles of Scilly goal[†] and central score.

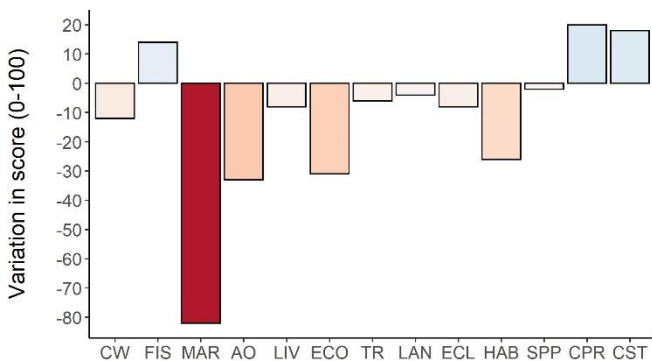


Figure 2. variation from the South West OHI+ central index score by goal. [†]CW (clean waters); FIS (fisheries), MAR (mariculture), AO (Artisanal Opportunities), ECO (Economy), LIV (Livelihoods), TR (Tourism), LAN (Landscapes), ECL (Ecological Features), HAB (Habitats), SPP (Species), CPR (Coastal Protection),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

years) monitoring of these habitats. The Isles of Scilly have a limited number of SSSI sites and small total area for sand dune and saltmarsh and mudflat habitat types. Despite their limited area, both dunes and littoral sediment habitats were assessed to be in favourable condition, although they have not been surveyed since 2012 or 2009 respectively. Seagrass in the Isles of Scilly is assessed as being in declining condition (increased levels of leaf infection), but when combined with the monitoring metric achieves relatively high OHI+ status scores as they are one of the few sites across the South West to have interannual surveys.

Fisheries. The region was also the highest scoring (Table 1) for the Fisheries sub-goal (excluding the Severn Estuary region which recorded low or zero landings each year). The high score is attributed to the majority (97 of 107 tonnes) of landings in 2018 arising from lobster and crab stocks that are considered close to BBMSY or have Marine Conservation Society ‘recommended’ stock status. The region was also the only one to have a positive trend for fisheries, indicating landings were sustainable during the assessment period.

Low scoring goals and datasets

Mariculture. The lack of mariculture sites reflects the exposed and isolated nature of the islands, with no sheltered estuaries, which are often preferred for benthic shellfish aquaculture.

Economies and Artisanal Opportunities. Data informing the Economies sub-goal revealed a 37% decrease in per capita Gross Value Added (the value generated by any unit engaged in the production of goods and services) since 2012 and the Artisanal Opportunities ‘landings to port’ dataset a 60% decrease in the proportion of landings from under ten-metre vessels recorded as since 2014. The region experiences the largest share of its’ landing from the under ten-metre fleet and the equal highest GVA per capita for marine related industries when compared to all other OHI+ regions. However, as the OHI+ currently measures a regions current status against its recent past to determine scores for these goals, declines during the reporting period result in low scores compared to regions that see stability or increases over time.

Recommendations and limitation

The Isles of Scilly was one of the top performing regions when interrogating source data on water clarity (suspended detrital matter), proportion of landings by under ten-metre vessels and trawl intensity over soft-bottom benthic habitats. However, these datasets experienced declines over the five years assessment period and as such the region scored poorly. Early iterations of the OHI+ explored using reference points that compared all regions’ status against each other, with the best performing region becoming the benchmark (score of 100). Using this approach would result in the Isles of Scilly becoming the 3rd highest scoring region, with notable increases to certain goals (i.e. the Clean Waters increased from 62 to 88).

These ‘across region’ reference points however have limitations (limited model sensitivity and potentially unconstructive comparisons across regions with distinct biogeography and socioeconomic characteristics). Tracking each region’s performance over time was therefore considered preferable. The influence of benchmark reference points on OHI+ scores reveals the need for more defined management targets in the South West. This would aid clarity when designing effective management strategies and allow direct comparison between geographically distinct areas, likely resulting in higher OHI+ scores for the Isles of Scilly.

Table 1. Isles of Scilly best (green) and worst (red) performing goals compared to the OHI+ central index score.

GOAL	STATUS	TREND	PRESS.	RES.	FUTURE	SCORE	SW SCORE	DIFF.
Coastal Protection	79	-0.2	54	77	76	78	58	20
Carbon Storage	84	-0.1	47	77	86	85	67	18
Fisheries	72	0.1	53	73	79	76	62	14
Economies	64	-0.5	81	58	38	51	82	-31
Artisanal Opp.	56	-0.5	76	71	38	47	80	-33
Mariculture	0	0	62	81	0	0	82	-82