OHI+ South West England:
North Devon

Summary

North Devon (NOD-2; score 67) was the second highest performing region in the assessment (Figure 1). The region had the largest proportion of its inshore area designated for the conservation of sites with cultural, aesthetic or recreational value (Table 1). It was also the only region in the South West to experience an increase in marine-related jobs and wages in recent years (2014 to 2018). North Devon's fisheries were estimated to be the least sustainable of any OHI+ region (Figure 2; score 35), due to landings dominated by species considered particularly vulnerable to over-exploitation.

Figure 1. North Devon goal[†] and central score.

High scoring goals and datasets

Landscapes. North Devon currently has approximately 96% of its inshore area (1 km inshore to 3 nm offshore) designation for the purpose of protecting areas valued for aesthetics, culture and recreation. This is primarily due to the North Devon Biosphere (142 km^2), which accounts for 94% of the inshore zone.

Habitats: North Devon scored highly (92) for the Habitats sub-goal. The region's soft and hard benthic habitats are estimated to have experienced some of the lowest disturbance from bottom towed gears (used as a proxy for condition) in the South West, averaging 0.44 and 0.017 fishing hours per km^2 per year respectively. However, this dataset only accounts for AIS instrumented vessels (required on vessels larger than 15 meters in length) and may exclude smaller vessels deploying bottom towed gears.

Livelihoods. North Devon is one of two regions in the South West estimated to have achieved a net increase in marine-related jobs (i.e. boat building, fish processing) by 2018, and the only region with wages increases that keep pace with the Consumer Price Index (CPI). This resulted in a maximum score of 100 for the Livelihoods sub-goal.

Low scoring goals and datasets

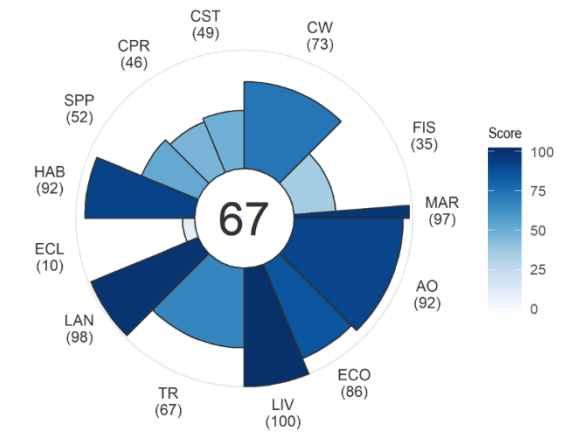*Fisheries:* North Devon received the lowest OHI+ score for the Fisheries sub-goal (35). The region's
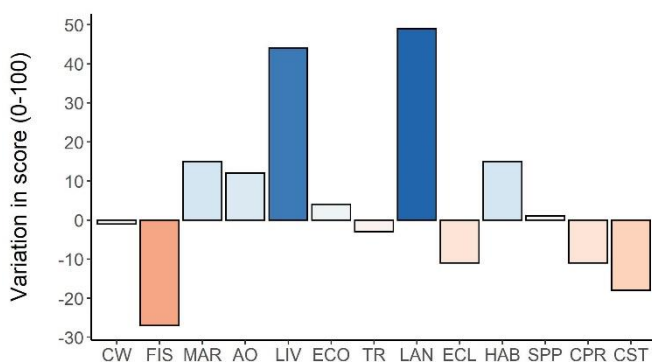

Figure 2. variation from the South West OHI+ central index score by goal. [†]CW (clean waters); FIS (fisheries), MAR (mariculture), AO (Artisanal Opportunities), ECO (Economy), LIV (Livelihoods), TR (Tourism), LAN (Landscapes), ECL (Ecological Features), HAB (Habitats), SPP (Species), CPR (Coastal Protection),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

landings were mostly limited to three stocks, with 81% of the 789 mt landed in 2018 dominated by whelks (*Buccinidae*), dogfish (*Squalidae*) or skate and ray species (*Rajiformes*). All three stocks are considered vulnerable to fishing pressure, either due to life-history traits (i.e. low reproductive rates) making them sensitive to overfishing or historical population declines, and therefore received a low sustainability ranking in the OHI+.

Carbon Storage: The Carbon Storage sub-goal scored (49) poorly for the region. No seagrass or maerl sites occur within the region's boundaries, making the sub-goal a direct measure of saltmarsh and mudflats. The region had four sites with littoral sediment as the main habitat type covering 11 km^2, with three in 'Favourable' condition and the remaining site categorised as 'Unfavourable, no change', although it was the smallest site by area (0.61 km^2). Only one of the region's Sites of Special Scientific Interest (SSSI) sites was recently surveyed (2015) to confirm these condition rankings, with the second largest by site by area, the Braunton Burrows SSSI, unassessed since 2006 (as of 2018).

Ecological Features: North Devon scored highly (98) for spatial designation of culturally important areas but was the worst-performing region for ecological designations, with just 7% coverage of the inshore zone (1 km inland and 12 nm) as of 2018. The region would benefit from the identification and designation of new ecologically important sites if appropriate.

Recommendations and limitation

Fisheries: The OHI+ would greatly benefit from an increase in B/BMSY (Biomass Maximum Sustainable Yield) assessments for commonly landed species. Over 90% of North Devon's 789 landed tonnes in 2018 had no BBMSY assessment available, making it heavily reliant on Marine Conservation Society Good Fish Guide recommendations. Although most regions had greater BBMSY coverage of stocks, the availability and standardisation of BBMSY metrics for all stocks would improve confidence and comparability in the Fisheries goal score.

Coastal Systems: North Devon's neighbouring region, the Severn Estuary and Bristol Channel (SEB-1), scored similarly (48 and 43) for the Coastal Systems goal. Both regions had some of the lowest monitoring rates in the assessment. The South West's north coast should be considered a priority area for future survey efforts of important coastal habitats.

Table 1. North 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.
Landscapes	96	0	59	92	100	98	49	**49**
Livelihoods	100	0.3	54	42	100	100	56	**44**
Habitats	85	0.5	33	75	100	92	77	**15**
Ecological Feat.	7	1	48	92	13	10	21	-11
Carbon Storage	55	-0.4	46	75	45	49	67	-18
Fisheries	35	-0.2	24	71	36	35	62	-27