

13. European eel (*Anguilla anguilla*)

Sensitivity Assessment

No existing MarESA or FeAST sensitivity assessments for European eel were available, therefore a full literature search and MarESA assessment were conducted. The OSPAR status assessment in 2022 covered the majority of the identified pressures and was used to supplement the MarESA results. To identify key considerations in the Celtic Sea, an external expert in the subject area was also consulted. The following sensitivity assessment is therefore based on the MarESA protocol and OSPAR assessment supplemented with key literature.

Table A11.13. Sensitivity assessment for European eel (*Anguilla anguilla*) NR = not relevant, NA = not assessed, NEv = no evidence, H = high, M = medium, L = low, VL = very low, N = none, NS = not sensitive. Associated sectors include activities related to offshore renewable energy (O), Fishing (F), or shipping (S).

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity			
Classification	Pressure type		Score	QoE	AoE	DoC	Score	QoE	AoE	DoC	Score	QoE	AoE	DoC
Physical	Physical loss (to land or freshwater habitat)	O	N	H	H	H	VL	H	H	H	H	H	H	H
	Physical change (to another seabed type)	O, F	N	H	H	H	VL	H	H	H	H	H	H	H

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity			
Classification	Pressure type		Score	QoE	AoE	DoC	Score	QoE	AoE	DoC	Score	QoE	AoE	DoC
	Physical change (to another sediment type)	O, F									NEv	NR	NR	NR
	Habitat structure change-removal of substratum (extraction)	O									NEv	NR	NR	NR
	Abrasion/disturbance of substratum surface or seabed	O, F									NEv	NR	NR	NR
Physical	Penetration or disturbance of substratum subsurface	O, F									NEv	NR	NR	NR
	Changes in suspended solids (water clarity)	O, F									NEv	NR	NR	NR

Appendix 11 Sensitivity Analyses - 13 European eel

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity			
Classification	Pressure type		Score	QoE	AoE	DoC	Score	QoE	AoE	DoC	Score	QoE	AoE	DoC
	Smothering and siltation changes (light)	O									NEv	NR	NR	NR
	Smothering and siltation changes (heavy)	O									NEv	NR	NR	NR
	Underwater noise	O, F, S									M	L	M	L
	Electromagnetic energy	O	M	H	H	M	M	H	H	M	M	H	H	M
	Barrier to species movement	O, F	L	H	H	H	L	H	H	H	H	H	H	H
	Death or injury by collision	O, F, S	L	H	H	H	L	H	H	H	H	H	H	H
Hydrological	Water flow changes	O									NEv	NR	NR	NR

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity			
Classification	Pressure type		Score	QoE	AoE	DoC	Score	QoE	AoE	DoC	Score	QoE	AoE	DoC
Chemical	Transition elements & organo-metal contamination	O, F, S									Sensitive	H	H	H
	Hydrocarbon & PAH contamination	O, F, S									Sensitive	H	H	H
	Synthetic compound contamination	O, F, S									Sensitive	H	H	H
Chemical	Introduction of other substances	O, F, S									Sensitive	H	H	H
	Deoxygenation	O									NEv	NR	NR	NR
Biological	Introduction or spread of invasive non-indigenous species	O, F, S									Sensitive	H	H	H

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity			
Classification	Pressure type		Score	QoE	AoE	DoC	Score	QoE	AoE	DoC	Score	QoE	AoE	DoC
	Removal of target species	F	L	H	H	H	VL	H	H	H	H	H	M	H
	Removal of non-target species	F	L	H	H	H	VL	H	H	H	H	H	M	H

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Literature Search

Web of Science search terms

("european eel" OR "Anguilla anguilla" OR "A. anguilla") AND ("angl*" OR "beam" OR "bottom trawl*" OR "by-catch" OR "dredge*" OR "fish*" OR "gear" OR "gillnet*" OR "hook*" OR "injury" OR "net*" OR "otter trawl*" OR "remov*" OR "aggregate*" OR "anchor*" OR "ballast" OR "barrier*" OR "beach*" OR "launch*" OR "moor*" OR "noise" OR "ship*" OR "steaming" OR "collision*" OR "construction" OR "electro*" OR "turbine*" OR "renewable*" OR "wave" OR "wind" OR "wind farm*" OR "anoxia" OR "copper" OR "current*" OR "deoxy*" OR "disease*" OR "disturbance" OR "endocrine disru*" OR "eutrophication" OR "exposure" OR "heavy metals" OR "hydrocarbon" OR "hypoxia OR litter*" OR "non-native*" OR "nitrate*" OR "nitrite*" OR "noise" OR "radionuclide" OR "nutrient*" OR "oil" OR "PAH*" OR "PCB*" OR "regime" OR "sedimentation" OR "silt*" OR "tributyltin" OR "turbid*")

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