20. Circalittoral mud

Sensitivity Assessment

Sensitivity scores for characterising ecological groups sensu Tillin & Tyler-Walters (2013) were obtained from Tillin & Tyler-Walters (2014). See case report (Appendix 10) for details of ecological groups that characterise this feature. The resistance, resilience and sensitivity scores for each pressure comprise those scores for the ecological group(s) most sensitive to that pressure. For pressures not assessed in Tillin & Tyler-Walters (2014), scores for characterising species of each ecological group were obtained from the MarLIN website (www.marlin.ac.uk) where available. The overall scores for these pressures again comprises the scores of the most sensitive organism(s) to each pressure.

Table A11.20. Sensitivity assessment for circalittoral mud. Associated sectors include activities related to offshore renewable energy (O), Fishing (F), or shipping (S). NR = not relevant, NA = not assessed, NEv = no evidence, H = high, M = medium, L = low, VL = very low, N = none, NS = not sensitive. Refs = References. *Overall confidence score of the MarLIN sensitivity analyses for characterising species that followed the MarLIN sensitivity assessment approach used prior to MarESA.

Pressures		**Associated sector(s)**	**Resistance**				**Resilience**				**Sensitivity**				**Group or species associated with score**	**Refs**
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	1(a), 3, 5, 6, 8(a), 8(c), 9, 10	8
	Physical change (to another seabed type)	O, F	N	M	L	M	L	M	L	M	H	M	L	M	1(a), 3, 5, 6, 8(a), 8(c), 9, 10	8

	Physical change (to another sediment type)	O, F	N	M	L	M	L	M	L	M	H	M	L	M	1(a), 3, 5, 6, 8(a), 8(c), 9, 10	8
	Habitat structure change-removal of substratum (extraction)	O	N	M	L	M	L	M	L	M	H	M	L	M	1(a)	8
Physical	Abrasion/disturbance of substratum surface or seabed	O, F	L	H	H	L	L	M	L	M	H	M	L	L	1(a)	8
	Penetration or disturbance of substratum subsurface	O, F	L	H	H	L	L	M	L	M	H	M	L	L	1(a)	8
	Changes in suspended solids (water clarity)	O, F	NEv	NR	NR	NR	NEv	NR	NR	NR	NEv	NR	NR	NR		8
	Smothering and siltation changes (light)	O	M				H				L				*Asterias rubens, Amphiura filiformis*	4, 6
	Smothering and siltation changes (heavy)	O	N	L	L	NR	M	M	M	M	M	L	L	NR	5, 8(a), 8(c), 10	8
	Underwater noise	O, F, S	NEv	NR	NR	NR	NEv	NR	NR	NR	NEv	NR	NR	NR		8

	Electromagnetic energy	O	NEv	NR	NR	NR	NEv	NR	NR	NR	NEv	NR	NR	NR		8
	Barrier to species movement	O, F	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		8
	Death or injury by collision	O, F, S	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		8
Hydrological	Water flow changes	O	N	M	L	M	L	M	L	M	H	M	L	M	1(a)	8
Chemical	Transition elements & organo-metal contamination	O, F, S	L	NR	NR	NR	H	NR	NR	NR	L	NR	NR	NR	*Asterias rubens, Amphiura filiformis, Nephrops norvegicus*	4, 6, 7
Chemical	Hydrocarbon & PAH contamination	O, F, S	N	NR	NR	NR	H	NR	NR	NR	M	NR	NR	NR	*Asterias rubens, Amphiura filiformis, Amphiura chiajei*	3, 4, 6
	Synthetic compound contamination	O, F, S	N	NR	NR	NR	H	NR	NR	NR	M	NR	NR	NR	*Brissopsis lyrifera, Amphiura filiformis*	2, 6
	Introduction of other substances	O, F, S	NA	NR	NR	NR	NA	NR	NR	NR	NA	NR	NR	NR		

	Deoxygenation	O	L	NR	NR	NR	M	NR	NR	NR	M	NR	NR	NR	*Funiculina quadrangularis, Virgularia mirabilis, Asterias rubens, Brissopsis lyrifera, Nephrops norvegicus*	1, 2, 5, 4, 7,
Biological	Introduction or spread of invasive non-indigenous species	O, F, S	NEv	NR	NR	NR	NEv	NR	NR	NR	NEv	NR	NR	NR		
	Removal of target species	F	M	H	H	H	M	M	M	M	M	M	M	M	9	8
	Removal of non-target species	F	H	L	NR	NR	H	H	H	H	NS	L	NR	NR	1(a), 3, 5, 6, 8(a), 8(c), 9, 10	8