

Habitat	Sedimentary habitats			
Relevant Annex I habitats	Estuaries, Mudflats and sandflats not covered by seawater at low tide, Large shallow inlets and bays, Sandbanks which are slightly covered by sea water all the time, Coastal lagoon			
Bait collection activity with potential to interact with habitat (range of activity; Limited Common)	Accessing or crossing shore (includes trampling) (C) (12,21,29,30,34,48,59)			
UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48	x			
	Species collected by given method			
<i>Alitta virens</i> (C) (5,7,15,21,23,26-31,38,46-48,58-61)	All species			
<i>Hediste diversicolor</i> (C) (28-31,36,48,53)				
<i>Perinereis cultrifera</i> (C) (28,29,48)				
<i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59)				
<i>Arenicola defodiens</i> (C) (25,29,31,48)				
<i>Nephtys</i> spp. (O?) (29-31,46-48)				
<i>Ensis</i> spp. (O) (29-31,48,53)				
<i>Mya arenaria</i> (R) (29,48,53)				
<i>Cerastoderma edule</i> (R) (29,34,48,53)				
<i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88)				
Fanworm (R*) (53)				
<i>Littorina littorea</i> (R) (29,32,48)				
<i>Sabellaria</i> (R*) (37,48,81)				
'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea?</i> (89,90)				
Piddocks (R*) (85,91,92)				
<i>Carcinus maenas</i> (C) (4,9,29,48,69)				
Habitat impacts relevant to given activity			Impact (Low-High)	Evidence (Low-High)
Change in sediment topography			H	M (104)
Change physicochemical aspects of the sediment or interstices (e.g. PSA/organic)			M	H (12,65,104)
Change in contaminant concentration and bioavailability			-	-
Impact target species	H	M (104)		
Impacts on non-target species				
Measures of macrofaunal assemblage (univariate/multivariate/broad taxonomic groups)	H	H (12,65,104)		
Short-lived macrofauna and meiofauna	H	M (12)		
Long-lived macrofauna	H	H (12,104)		
Birds (disturbance/habitat modification/feeding behaviour)	M	M (16,28,38,42,45,49,56,60)		
Seals (disturbance)	M	L (72-75)		
Recovery rate sediment topography	Recovery (sediment type)	Evidence (L-H)		
Days		-		
Weeks		-		
Months (mudflat)		M (104)		
Recovery target species	Recovery (sediment type)	Evidence (L-H)		
Days		-		
Months		-		
Recovery non-target	Recovery (sediment type)	Evidence (L-H)		
Days		-		
Weeks		-		
Months (tidal flat)		M (12)		
Years		-		
Small or short-lived macrofauna/meiofauna	Days	-		
	Weeks	-		
	Months (tidal flat)	M (12)		
	Years	-		
Large or long-lived macrofauna	Days	-		
	Weeks	-		
	Months (tidal flat)	M (12)		
	Years	-		
Impact summary and recommendation	Majority Impact	Majority Impact Evidence		
	H	M		
Extent and Frequency - High	Recommend site-specific assessment of effects to decide if management necessary			
Extent and Frequency - Medium	Recommend site-specific assessment of effects to decide if management necessary			
Extent and Frequency - Low	Management not likely necessary			

Habitat	Sedimentary habitats	
Relevant Annex I habitats	Estuaries, Mudflats and sandflats not covered by seawater at low tide, Large shallow inlets and bays,	
Bait collection activity with potential to interact with habitat (range of activity; Limited Common)	Hand digging (C) (5-7,12,16,26,28-31,34,35,38,42,46-48,56,58-61)	
UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48	x	
	Species collected by given method	
<i>Alitta virens</i> (C) (5,7,15,21,23,26-31,38,46-48,58-61)	<i>A. virens</i>	
<i>Hediste diversicolor</i> (C) (28-31,36,48,53)	<i>H. diversicolor</i>	
<i>Perinereis cultrifera</i> (C) (28,29,48)	<i>P. cultrifera</i>	
<i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59)	<i>A. marina</i>	
<i>Arenicola defodiens</i> (C) (25,29,31,48)	<i>A. defodiens</i>	
<i>Nephtys</i> spp. (O?) (29-31,46-48)	<i>Nephtys</i> spp.	
<i>Ensis</i> spp. (O) (29-31,48,53)	<i>Ensis</i> spp.	
<i>Mya arenaria</i> (R) (29,48,53)	<i>M. arenaria</i>	
<i>Cerastoderma edule</i> (R) (29,34,48,53)	Fanworm	
<i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88)	<i>Sabellaria</i>	
Fanworm (R*) (53)	'Rockworms'	
<i>Littorina littorea</i> (R) (29,32,48)	Piddocks	
<i>Sabellaria</i> (R*) (37,48,81)		
'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea?</i> (89,90)		
Piddocks (R*) (85,91,92)		
<i>Carcinus maenas</i> (C) (4,9,29,48,69)		
Habitat impacts relevant to given activity	Impact (L-H)	Evidence (L-H)
Change in sediment topography	H	H (15,19,20,23,27,28,33,38,41,42,60,61)
Change physicochemical aspects of the sediment or interstices (e.g. PSA/organic content/chlorophyll/RPD)	M	M (2,11,19,20,23,41,52,58,60)
Change in contaminant concentration and bioavailability	H	M (35)
Impact target species	H	H (17,24,34,41,46,57,58)
Impacts on non-target species		
Measures of macrofaunal assemblage (univariate/multivariate/broad taxonomic groups)	M	M (10,11,14,19,20,33,57,60)
Short-lived macrofauna and meiofauna	H	H (10,20,35,39,40,51,52,57)
Long-lived macrofauna	H	H (1,3,10,20,36,57,58)
Birds (disturbance/habitat modification/feeding behaviour)	M	M (28,38,42,51)
Seals (disturbance)	-	-
Recovery rate sediment topography	Recovery (sed.)	Evidence (L-H)
	Days (sandy beach, sand and mud flats)	H (6,7)
	Weeks (mudflat)	L (42)
	Months (mixed, sand, muddy sand, mud)	H (15,19,20,33,41,42,60)
Recovery target species	Recovery (sed.)	Evidence (L-H)
	Days (mixed)	L (15)
	Months (sandy beach, sand and mudflats, muddy sand)	H (6,7,13,17,34,41,57)
Recovery non-target	Recovery (sed.)	Evidence (L-H)
Measures of macrofaunal assemblage (e.g. univariate/multivariate)	Days (coarse sediments)	M (11)
	Weeks	-
	Months (mud, range of sand types)	H (14,19,20,34,57)
	Years (sand)	M (14)
Small or short-lived macrofauna/meiofauna	Days (coarse sediments, mostly fine-med sands, mud)	H (11,52)
	Weeks (mudflat)	M (41)
	Months (fine sands; tidal flat)	H (20,57)
	Years	-
Large or long-lived macrofauna	Days (mixed, mostly fine-med sands)	M (11)
	Weeks (mudflat, tidal flat)	H (41,57)
	Months (fine sands, mudflat, tidal flat)	H (20,34,57)
	Years (clay/silt sediment with shingle and large flints)	M (58)
Impact summary and recommendation	Majority Impact	Majority Impact Evidence
	H	M-H
Extent and Frequency - High	Strongly recommend that management is considered	
Extent and Frequency - Medium	Recommend site-specific assessment of effects to decide if management necessary	
Extent and Frequency - Low	Management not likely necessary	

Habitat	Sedimentary habitats	
Relevant Annex I habitats	Estuaries, Mudflats and sandflats not covered by seawater at low tide, Large shallow inlets and bays,	
Bait collection activity with potential to interact with habitat (range of activity; Limited Common)	Bait dragging (L) (5,28,29,30,31,38, 42, 48)	
UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48	x	
	Species collected by given method	
<i>Alitta virens</i> (C) (5,7, 15,21,23,26-31,38,46-48,58-61)	<i>A. virens</i>	
<i>Hediste diversicolor</i> (C) (28-31,36,48,53)		
<i>Perinereis cultrifera</i> (C) (28,29,48)		
<i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59)		
<i>Arenicola defodiens</i> (C) (25,29,31,48)		
<i>Nephtys</i> spp. (O?) (29-31,46-48)		
<i>Ensis</i> spp. (O) (29-31,48,53)		
<i>Mya arenaria</i> (R) (29,48,53)		
<i>Cerastoderma edule</i> (R) (29,34,48,53)		
<i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88)		
Fanworm (R*) (53)		
<i>Littorina littorea</i> (R) (29,32,48)		
<i>Sabellaria</i> (R*) (37,48,81)		
'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea?</i> (89,90)		
Piddocks (R*) (85,91,92)		
<i>Carcinus maenas</i> (C) (4,9,29,48,69)		
Habitat impacts relevant to given activity	Impact (L-H)	Evidence (L-H)
Change in sediment topography	H	M (19,20,28,38,42)
Change physicochemical aspects of the sediment or interstices (e.g. PSA/organic content/chlorophyll/RPD)	M	M (5,19,20)
Change in contaminant concentration and bioavailability	-	-
Impact target species	-	-
Impacts on non-target species		
Measures of macrofaunal assemblage (univariate/multivariate/broad taxonomic groups)	M	M (19,20)
Short-lived macrofauna and meiofauna	H	M (20)
Long-lived macrofauna	H	M (20)
Birds (disturbance/habitat modification/feeding behaviour)	M	L (28,38,42)
Seals (disturbance)	-	-
Recovery rate sediment topography	Recovery (sed.)	Evidence (L-H)
	Days	-
	Weeks	-
	Months (sand, muddy sand, mud)	M (19,20)
Recovery target species	Recovery (sed.)	Evidence (L-H)
	-	-
	-	-
Recovery non-target	Recovery (sed.)	Evidence (L-H)
	Days	-
	Weeks	-
	Months (mud, range of sand types)	M (19,20)
	Years	-
Small or short-lived macrofauna/meiofauna	Days	-
	Weeks	-
	Months (fine sands)	M (20)
	Years	-
Large or long-lived macrofauna	Days	-
	Weeks	-
	Months (fine sands)	M (20)
	Years	-
Impact summary and recommendation	Majority Impact	Majority Impact Evidence
Extent and Frequency - High	M-H	M
Extent and Frequency - Medium	Recommend site-specific assessment of effects to decide if management necessary	
Extent and Frequency - Low	Management not likely necessary	

Habitat	Sedimentary habitats	
Relevant Annex I habitats	Estuaries, Mudflats and sandflats not covered by seawater at low tide, Large shallow inlets and bays,	
Bait collection activity with potential to interact with habitat (range of activity; Limited Common)	Bait pump (C?) (29,30,31,48,59,64) x	
UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48	Species collected by given method	
<i>Alitta virens</i> (C) (5,7,15,21,23,26-31,38,46-48,58-61)	<i>A. defodiens</i>	
<i>Hediste diversicolor</i> (C) (28-31,36,48,53)	<i>Ensis</i> spp.	
<i>Perinereis cultrifera</i> (C) (28,29,48)		
<i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59)		
<i>Arenicola defodiens</i> (C) (25,29,31,48)		
<i>Nephtys</i> spp. (O?) (29-31,46-48)		
<i>Ensis</i> spp. (O) (29-31,48,53)		
<i>Mya arenaria</i> (R) (29,48,53)		
<i>Cerastoderma edule</i> (R) (29,34,48,53)		
<i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88)		
Fanworm (R*) (53)		
<i>Littorina littorea</i> (R) (29,32,48)		
<i>Sabellaria</i> (R*) (37,48,81)		
'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea?</i> (89,90)		
Piddocks (R*) (85,91,92)		
<i>Carcinus maenas</i> (C) (4,9,29,48,69)		
Habitat impacts relevant to given activity	Impact (L-H)	Evidence (L-H)
Change in sediment topography	H	M (79)
Change physicochemical aspects of the sediment or interstices (e.g. PSA/organic content/chlorophyll/RPD)	H	M (65,76,79)
Change in contaminant concentration and bioavailability	-	-
Impact target species	H	M (65,76-79)
Impacts on non-target species		
Measures of macrofaunal assemblage (univariate/multivariate/broad taxonomic groups)	M	M (14,65,77,79,80)
Short-lived macrofauna and meiofauna	H	M (77-79)
Long-lived macrofauna	H	M (77-80)
Birds (disturbance/habitat modification/feeding behaviour)	-	-
Seals (disturbance)	-	-
	Recovery (sed.)	Evidence (L-H)
Recovery rate sediment topography	-	-
	-	-
	-	-
	Recovery (sed.)	Evidence (L-H)
Recovery target species	Months (sandflat)	M (65,79)
	Years (sandflat)	M (79)
Recovery non-target	Recovery (sed.)	Evidence (L-H)
Measures of macrofaunal assemblage (e.g. univariate/multivariate)	Days	-
	Weeks	-
	Months (sandflat)	M (79)
	Years (sand)	M (14,79)
Small or short-lived macrofauna/meiofauna	Days	-
	Weeks	-
	Months (sandflat)	M (79)
	Years (sandflat)	M (79)
Large or long-lived macrofauna	Days	-
	Weeks	-
	Months (sandflat)	M (79)
	Years (sandflat)	M (79)
Impact summary and recommendation	Majority Impact	Majority Impact Evidence
	H	M
Extent and Frequency - High	Recommend site-specific assessment of effects to decide if management necessary	
Extent and Frequency - Medium	Recommend site-specific assessment of effects to decide if management necessary	
Extent and Frequency - Low	Management not likely necessary	

Habitat	Sedimentary habitats	
Relevant Annex I habitats	Estuaries, Mudflats and sandflats not covered by seawater at low tide, Large shallow inlets and bays,	
Bait collection activity with potential to interact with habitat (range of activity; Limited Common)	Raking (L?) (19,48,50,67,88)	
UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48	x	
	Species collected by given method	
<i>Alitta virens</i> (C) (5,7,15,21,23,26-31,38,46-48,58-61)	<i>C. edule</i>	
<i>Hediste diversicolor</i> (C) (28-31,36,48,53)	<i>M. edulis</i>	
<i>Perinereis cultrifera</i> (C) (28,29,48)		
<i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59)		
<i>Arenicola defodiens</i> (C) (25,29,31,48)		
<i>Nephtys</i> spp. (O?) (29-31,46-48)		
<i>Ensis</i> spp. (O) (29-31,48,53)		
<i>Mya arenaria</i> (R) (29,48,53)		
<i>Cerastoderma edule</i> (R) (29,34,48,53)		
<i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88)		
Fanworm (R*) (53)		
<i>Littorina littorea</i> (R) (29,32,48)		
<i>Sabellaria</i> (R*) (37,48,81)		
'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea?</i> (89,90)		
Piddocks (R*) (85,91,92)		
<i>Carcinus maenas</i> (C) (4,9,29,48,69)		
Habitat impacts relevant to given activity	Impact (L-H)	Evidence (L-H)
Change in sediment topography	L	M (67,103)
Change physicochemical aspects of the sediment or interstices (e.g. PSA/organic content/chlorophyll/RPD)	M	M (19,20,67,68,103)
Change in contaminant concentration and bioavailability	-	-
Impact target species	H	H (62,67,70)
Impacts on non-target species		
Measures of macrofaunal assemblage (univariate/multivariate/broad taxonomic groups)	M	M (14,19,20,63,67,68,70,103)
Short-lived macrofauna and meiofauna	H	H (20,63,67)
Long-lived macrofauna	H	H (20,63,70)
Birds (disturbance/habitat modification/feeding behaviour)	-	-
Seals (disturbance)	-	-
Recovery rate sediment topography	Recovery (sed.)	Evidence (L-H)
Days	-	-
Weeks	-	-
Months (sand, muddy sand, mud)	-	M (19,20)
Recovery target species	Recovery (sed.)	Evidence (L-H)
-	-	-
-	-	-
Recovery non-target	Recovery (sed.)	Evidence (L-H)
Measures of macrofaunal assemblage (e.g. univariate/multivariate)	Days	-
	Weeks	-
	Months (mud, range of sand types)	M (19,20,67)
	Years (sand, mud)	M (14,67)
Small or short-lived macrofauna/meiofauna	Days	-
	Weeks	-
	Months (fine sands)	M (20)
	Years	-
Large or long-lived macrofauna	Days	-
	Weeks	-
	Months (fine sands)	M (20)
	Years	-
Impact summary and recommendation	Majority Impact	Majority Impact Evidence
	H	M-H
Extent and Frequency - High	Strongly recommend that management is considered	
Extent and Frequency - Medium	Recommend site-specific assessment of effects to decide if management necessary	
Extent and Frequency - Low	Management not likely necessary	

Habitat	Sedimentary habitats	
Relevant Annex I habitats	Estuaries, Mudflats and sandflats not covered by seawater at low tide, Large shallow inlets and bays,	
Bait collection activity with potential to interact with habitat (range of activity; Limited Common)	Salting (?) (48,64) x	
UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48	Species collected by given method	
<i>Alitta virens</i> (C) (5,7,15,21,23,26-31,38,46-48,58-61)	<i>Ensis</i> spp.	
<i>Hediste diversicolor</i> (C) (28-31,36,48,53)		
<i>Perinereis cultrifera</i> (C) (28,29,48)		
<i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59)		
<i>Arenicola defodiens</i> (C) (25,29,31,48)		
<i>Nephtys</i> spp. (O?) (29-31,46-48)		
<i>Ensis</i> spp. (O) (29-31,48,53)		
<i>Mya arenaria</i> (R) (29,48,53)		
<i>Cerastoderma edule</i> (R) (29,34,48,53)		
<i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88)		
Fanworm (R*) (53)		
<i>Littorina littorea</i> (R) (29,32,48)		
<i>Sabellaria</i> (R*) (37,48,81)		
'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea?</i> (89,90)		
Piddocks (R*) (85,91,92)		
<i>Carcinus maenas</i> (C) (4,9,29,48,69)		
Habitat impacts relevant to given activity	Impact (L-H)	Evidence (L-H)
Change in sediment topography	-	-
Change physicochemical aspects of the sediment or interstices (e.g. PSA/organic content/chlorophyll/RPD)	M	M (93)
Change in contaminant concentration and bioavailability	-	-
Impact target species	-	-
Impacts on non-target species		
Measures of macrofaunal assemblage (univariate/multivariate/broad taxonomic groups)	L	M (93)
Short-lived macrofauna and meiofauna	L	M (93)
Long-lived macrofauna	-	-
Birds (disturbance/habitat modification/feeding behaviour)	-	-
Seals (disturbance)	-	-
Recovery rate sediment topography	Recovery (sed.)	Evidence (L-H)
	-	-
	-	-
	-	-
Recovery target species	Recovery (sed.)	Evidence (L-H)
	-	-
	-	-
Recovery non-target	Recovery (sed.)	Evidence (L-H)
	-	-
	-	-
Measures of macrofaunal assemblage (e.g. univariate/multivariate)	-	-
	-	-
	-	-
Small or short-lived macrofauna/meiofauna	-	-
	-	-
	-	-
Large or long-lived macrofauna	-	-
	-	-
	-	-
	-	-
Impact summary and recommendation	Majority Impact	Majority Impact Evidence
	L	M
Extent and Frequency - High	Level of activity may warrant site-specific assessment to verify low impact and need for management	
Extent and Frequency - Medium	Level of activity may warrant site-specific assessment to verify low impact and need for management	
Extent and Frequency - Low	Management not likely necessary	

Habitat	Sedimentary habitats	
Relevant Annex I habitats	Estuaries, Mudflats and sandflats not covered by seawater at low tide, Large shallow inlets and bays,	
Bait collection activity with potential to interact with habitat (range of activity; Limited Common)	Hand picking (?) (29,31,32,37,48,50)	
UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48	x	
	Species collected by given method	
<i>Alitta virens</i> (C) (5,7, 15,21,23,26-31,38,46-48,58-61)	<i>M. edulis</i>	
<i>Hediste diversicolor</i> (C) (28-31,36,48,53)	<i>C. edule</i>	
<i>Perinereis cultrifera</i> (C) (28,29,48)	<i>Ensis</i> spp.	
<i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59)	<i>L. littorea</i>	
<i>Arenicola defodiens</i> (C) (25,29,31,48)		
<i>Nephtys</i> spp. (O?) (29-31,46-48)		
<i>Ensis</i> spp. (O) (29-31,48,53)		
<i>Mya arenaria</i> (R) (29,48,53)		
<i>Cerastoderma edule</i> (R) (29,34,48,53)		
<i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88)		
Fanworm (R*) (53)		
<i>Littorina littorea</i> (R) (29,32,48)		
<i>Sabellaria</i> (R*) (37,48,81)		
'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea?</i> (89,90)		
Piddocks (R*) (85,91,92)		
<i>Carcinus maenas</i> (C) (4,9,29,48,69)		
Habitat impacts relevant to given activity	Impact (L-H)	Evidence (L-H)
Change in sediment topography	-	-
Change physicochemical aspects of the sediment or interstices (e.g. PSA/organic content/chlorophyll/RPD)	-	-
Change in contaminant concentration and bioavailability	-	-
Impact target species	-	-
Impacts on non-target species		
Measures of macrofaunal assemblage (univariate/multivariate/broad taxonomic groups)	-	-
Short-lived macrofauna and meiofauna	-	-
Long-lived macrofauna	-	-
Birds (disturbance/habitat modification/feeding behaviour)	-	-
Seals (disturbance)	-	-
Recovery rate sediment topography	Recovery (sed.)	Evidence (L-H)
	-	-
	-	-
Recovery target species	Recovery (sed.)	Evidence (L-H)
	-	-
Recovery non-target	Recovery (sed.)	Evidence (L-H)
	-	-
Measures of macrofaunal assemblage (e.g. univariate/multivariate)	-	-
	-	-
Small or short-lived macrofauna/meiofauna	-	-
	-	-
Large or long-lived macrofauna	-	-
	-	-
Impact summary and recommendation	Majority Impact	Majority Impact Evidence
	-	-
Extent and Frequency - High	-	-
Extent and Frequency - Medium	-	-
Extent and Frequency - Low	-	-

Habitat	Sedimentary habitats	
Relevant Annex I habitats	Estuaries, Mudflats and sandflats not covered by seawater at low tide, Large shallow inlets and bays,	
Bait collection activity with potential to interact with habitat (range of activity; Limited Common)	Crab tiling (C)	
UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48	x	
	Species collected by given method	
<i>Alitta virens</i> (C) (5,7, 15,21,23,26-31,38,46-48,58-61)	<i>C. maenas</i>	
<i>Hediste diversicolor</i> (C) (28-31,36,48,53)		
<i>Perinereis cultrifera</i> (C) (28,29,48)		
<i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59)		
<i>Arenicola defodiens</i> (C) (25,29,31,48)		
<i>Nephtys</i> spp. (O?) (29-31,46-48)		
<i>Ensis</i> spp. (O) (29-31,48,53)		
<i>Mya arenaria</i> (R) (29,48,53)		
<i>Cerastoderma edule</i> (R) (29,34,48,53)		
<i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88)		
Fanworm (R*) (53)		
<i>Littorina littorea</i> (R) (29,32,48)		
<i>Sabellaria</i> (R*) (37,48,81)		
'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea?</i> (89,90)		
Piddocks (R*) (85,91,92)		
<i>Carcinus maenas</i> (C) (4,9,29,48,69)		
Habitat impacts relevant to given activity	Impact (L-H)	Evidence (L-H)
Change in sediment topography	M	L (69)
Change physicochemical aspects of the sediment or interstices (e.g. PSA/organic content/chlorophyll/RPD)	M	M (18)
Change in contaminant concentration and bioavailability	-	-
Impact target species	M	M (69)
Impacts on non-target species		
Measures of macrofaunal assemblage (univariate/multivariate/broad taxonomic groups)	M	M (18,105 - not seen)
Short-lived macrofauna and meiofauna	M	M (8)
Long-lived macrofauna	-	-
Birds (disturbance/habitat modification/feeding behaviour)	M	M (22,32)
Fish	M	M (66)
Seals (disturbance)	-	-
Recovery rate habitat	-	-
Recovery rate target	-	-
Recovery non-target	Recovery (sediment type)	Evidence (L-H)
Measures of macrofaunal assemblage (e.g. univariate/multivariate)	Days	-
	Weeks	-
	Months	-
	Years	-
Small or short-lived macrofauna/meiofauna	Days (mudflats)	M (8)
	Weeks	-
	Months	-
	Years	-
Large or long-lived macrofauna	Days	-
	Weeks	-
	Months	-
	Years	-
Impact summary and recommendation	Majority Impact	Majority Impact Evidence
	M	M
Extent and Frequency - High	Recommend site-specific assessment of effects to decide if management necessary	
Extent and Frequency - Medium	Recommend site-specific assessment of effects to decide if management necessary	
Extent and Frequency - Low	Management not likely necessary	

Habitat	Sedimentary habitats
Relevant Annex I habitats	Estuaries, Mudflats and sandflats not covered by seawater at low tide, Large shallow inlets and bays, Sandbanks which are slightly covered by sea water all the time, Coastal lagoon
Overall impact summary - Habitat	Change in sediment topography is a key habitat impact, particularly with respect to digging and dragging which can create bait scars on the sediment. Changes in sediment particle size, chlorophyll a, and organic content were other key impacts, but statistically significant changes in these measures were often not consistent across studies. Unique to salting was a change in interstitial salinity, however this recovered in hours.
Overall impact summary - Target species	Key impacts on targeted bait species are reductions in density, as observed particularly in the digging and pumping studies, the latter limited to evidence for Thalassinid shrimp instead of <i>Arenicola defodiens</i> targeted in the UK. One digging study found higher densities, but lower average weight for <i>Allitta virens</i> at dug sites compared to undug sites. Trampling may also affect targeted species (e.g. one study found trampling to cause a significant reduction in <i>Cerastoderma edule</i> >12mm). This has important implications for the impacts of bait collection on target species beyond species removal.
Overall impact summary - Non-target macrofauna/meiofauna	Evidence for significant impacts on known bird prey and/or ecosystem engineering species (long-lived and short-lived) was identified across collection activities, with the exception of salting, for which no significant effects on non-target macrofauna were identified. Impacts on both univariate and multivariate measures of the macrofaunal assemblage were identified with consistency in some measures (e.g. consistently significant impacts of digging on richness and multivariate measures of the assemblage), and inconsistency in others (e.g. findings of significant impacts on number of individuals was often inconsistent among studies).
Overall impact summary - Birds	Visual disturbance by the presence of harvesters on the shore or habitat modification (e.g. sediment disturbance) may impact birds utilising coastal habitats. For example, one study found the presence of harvesters to have a significant effect on foraging activity of curlews, however a number of other measures of curlew feeding/foraging behaviour were not negatively affected. Another study noted a significantly lower foraging efficiency for Semipalmated Sandpiper in dug compared to undisturbed sediment.
Overall impact summary - Seals	The presence of bait diggers may disturb seals and cause them to take to the water and move to another site. Evidence for seal disturbance caused by bait digging comes from the Tees Estuary.