Final Report and Recommendations

September 7th, 2011

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This is one of seven download sections of Finding Sanctuary's final report, which was initially only made available to download as a single document. Because of the large size of the final report, we have made it available in this format for users who have had difficulty downloading it in one go or printing off individual pages from the large PDF.

Where possible, readers are advised to download the single document in preference to the separate download sections. Although the content is identical, the hyperlinks in the report's main Table of Contents and List of Maps are severed when the PDF is split.

Appendix 1: Acknowledgements

The Finding Sanctuary project could not have been successful without the support of a very large number of individuals. Apologies to anyone we have missed.

Development of recommendations: Stakeholders

The completion of the recommendations presented in part II of this report are the result of hundreds of hours of work by a large number of stakeholder representatives, many of whom put in several days of their own time into the planning process. The members of the Inshore and Offshore Working Groups deserve particular mention, but many other individuals have worked very hard on shaping the network and accompanying narrative, including within the Local Groups. The membership of the stakeholder groups is detailed in appendices 2, 3, and 4.

Project Delivery and support

Project Founders: Chris Davis, Kate Bull, Roger Covey, Philippa Hoskin, Janette Ward

Project Board: Christine Marshall, Helen Booker, Ken Buchan, Jamie Davies, Phil Dyke, Rachel Waldock, Jenny Christie, Aidan Winder, Trevor Edwards, Amy Ridgeway, Jon Davies, Janette Ward, Philippa Hoskins, Rebecca Seaman, Simon Brenman, Chris Davis, Kate Bull

National Partners: Beth Stoker, Rhiannon Pipkin, Sangeeta McNair, Fiona McNie, Annabelle Aish, Jen Ashworth, Kate Bull, Sarah Wiggins, Gavin Black, Eddy Mayhew, James Marsden, John Goold, Nigel Gooding, Simon Crabbe, Jo Myers, Emily Musson, Gavin Ross, Ian Barrett, Alison Reeves, Kath Cameron, Cristina Herbon, Darren Green, Sarah Baxter, Lizzy Pearson, Robbie Fisher, Lydia Barnes, Michelle Hawkins, Roger Ward

Volunteers and Assistants: Catherine Burgess, Lauren Davis, Vanessa Smith, Esther Hughes, Dan Bayley, Holly Latham, Armandina Deller, Olusola Popoola

External support: Nick Pearce, Aimee Hammett, Guy Newman, Annette Newman, Abby Elliot-Square, Joanne Myram, Bertie Bowser, Claire Carsberg, Jon Young, Andrew May

Volunteer Liaison Officers: Melissa Clout, Brian Collic, Adrian Dowding, Roger Hollingsworth, Kate Last, Peter Maddern, Dougal Matthews, Martin Pratt, David Rayfield, Hannah Rose, Sharon Scurlock, Phil Sylvester, George Whitfield, Ben Winter

Office support: Mark Stevens, Julie Sherry, Jess Hoult

Data Providers

FisherMap and StakMap
Between October 2007 and October 2010 a total of 860 interviews were conducted with sea users across the region representing 251 fishing vessels and 247372 sea users. We are extremely grateful to all interviewees for giving up their time to help complete the questionnaires.

Those who have agreed to let us acknowledge them personally are as follows: Lewis Mulhearn, Paul Reidy, Douglas Hamlen, Steve Cox, Guy Penwarden, Geoff King, P.A. Hodder,

Richard English, I. Kitto, Barry Hudson, Anthony Clarke, L. Stantiford, Tom Creasty, AnneField, Ian Fryett, Bob Elliott, Harry May, Simon Twichen, Stuart Athay, David Simpson, F.J. Williams, Jeremy Teale, Giles Bowen, Jamie Miller, Richard Hedger, Mark Wills, Ceri Lewis, Carl Coombes, Mike Weathersbee, Brian Allen, Chris Bird, Stuart Athay, John Baxter, John Case, Mike Spiller, Mike Bailey, Michael Taylor, Julia Filer, Rodney North, Dave Jenkins, Stuart Winfield, Lina Lovehagen, Sarah Dashfield, Richard Blair, Dave Peake, Martin Pratt, Andrew Laird, Gill Harcombe, Simon Tapper, Kathryn Last, Peter Ellis, Mike Markey, E. Warwick, Andy Young, Jacqueline Hardy, Steve Trewhella, Jerome Smith, Dave Gibson, David Young, N. Holder, Matt Toms, Peter Gough, Alex Gibbons, Trevor Small, Colin Smith, Ian Taylor, Steve Porter, John Stevenson, Paul Pike, Colin Penny, Andy Cumming, David Pitman, Christopher Caines, F. Smith, A. Ponchaud, Terry Allen, Mathew Rowe, Mike Minvalla, Alistair Kendrick, R.J. Styles, D. Laut, Nick Bainton, Andrew Kiddler, David Walters, Donald Campbell,Ian White, Keith Chester, Ivan Lakin, Dave Roberts, Don Metcalfe, Dudley Mumford, W. S. Thomas, Simon Coe, James Eaton, Nick Bright, Chris Brett, Adam Morris, Robert Bushrod, Ed Russell, Roger Prowse, Derek Smith, John Sweetland, Charlie Evans, Andy Spiller, Charlie Ziemann, Alan Douse, Brian Pawley, Andrew Pillar, Steve Brenchley, John Brannan, Guy Hagg, Mike Channon, Keith Diplock, Phil Cheeseman, Eamon Riorda, Pete Hegg, Peter Russell, Andy Lambert, James Smith, Derek Blackmore, Peter Goodman, David Fortune, Ken Cave, Nigel Rundle, Dave Chesterfield

Ecological Data Providers: Devon Environmental Records Centre, Russell Wynn, Neil Garrick-Maidment, Peter Tinsley, Dorset Environmental Records Centre, Environmental Records Centre for Cornwall and the Isles of Scilly, Seasearch, Royal Haskoning, CEFAS, JNCC, Natural England, Torbay Coast and Countryside Trust, North Devon Biosphere, Isles of Scilly Wildlife Trust, Pauline Weatherall (GEBCO), Helen Booker (RSPB), Gavin Black (DERC), Paul Robinson (JNCC), Beth Stoker (JNCC), Caroline Turnbull (JNCC), Matt Parsons (JNCC), Leigh Jones (Natural England)

Ecological Advisors, Science Workshop Participants: Gavin Black, Jean-Luc Solandt, Lauren Davis, Sue Ranger, Fiona McNie, Colin Speedie, Nick Tregenza, Tom Brereton, Dave Jarvis, Sue Sayer, Matt Witt, Rory Goodall, Ali Hood, Doug Herdson, Peter Richardson, Milly Hatton-Brown, Chris Davis, Beth Stoker, Nathalie Coltman, David Cotton, Nathan Sykes, Peter Tinsley, Richard White, Miles Hoskin, Philippa Hoskin, Emma Jackson, Andy Webb, James Grecian, Alice Jones, Russell Wynn, Nigel Smallbones, Paul McCartney, Ruth Porter, Paul St. Pierre, Kate Sugar, Helen Booker, Kerry Howell, Sian Rees, Miles Hoskin, Maria Campbell, Keith Hiscock, Robert Irving, Chris Wood, Harvey Tyler-Walters, Peter Tinsley

Isles of Scilly: Tim Allsop

Social Data Providers: William Lawrence (DSFC), Colin Trundle (CSFC), Jenny Christie (Cornwall Council), Nick Philips (Cornwall Wildlife Trust)

Technical Advice

A number of people have provided technical advice, constructive criticism and feedback to questions for the project over the years:

Jeff Ardron (Marine Conservation Biology Institute), Samantha Murray (Ocean Conservancy), Charles Steinback (Ecotrust), Will McClintock (University of California Santa Barbara), Mary Gleason (The Nature Conservancy), Dominique Monie (MLPA Initiative members &

associates), Hugh Possingham (University of Queensland), Bob Smith (DICE), Keith Hiscock (MarLIN), Lynda Rodwell (University of Plymouth), Annie Linley (Plymouth Marine Laboratory), Carissa Klein (University of Queensland), Dan Laffoley (IUCN), Fiona Gell (Isle of Man Government), Mark Duffy (Natural England), Jeff Jenness (Jenness Enterprises), Andrew Cottam (JNCC), Ian Ball (University of Queensland), Natalie Ban (University of British Columbia), ESRI user forum, Marxan mailing list

Photography

Paul Naylor, Steve Trewhella, David Peake

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Advocates and supporters

Paul Rose, Frank Pope, Jean-Luc Solandt, Joan Edwards, Paula Ferris, Alison Champion, Mark Simmonds

Regional project staff across England

The many project staff of the other three regional MCZ projects (Balanced Seas, Irish Sea Marine Conservation Zones, and Net Gain) deserve particular recognition for the support provided, including the sharing of tools, methods and experiences, and moral support. Thanks, and good luck to everyone following the end of the projects.

Appendix 2: Steering Group membership

SECTOR	SUBSECTOR	ORGANISATION	MEMBER	WORKING GROUP	SUBSTITUTE
Commercial Fishing [1]	Inshore	New Under Ten Fishermen's Association	Dave Cuthbert	Inshore	
	Inshore	South Coast Fishermen's Council	Richard Stride	Inshore	David Sales
	Inshore/ Offshore	North Devon Fishermen's Association	John Butterwith	Offshore	
	Offshore	South West Fish Producers Organisation (SWFPO)	Jim Portus		Nick Prust
	Inshore/Offshore	Cornish Fish Producers Organisation (CFPO)	Paul Trebilcock[2]		
	National	National Federation of Fishermen's Organisation (NFFO) SW Committee	Dale Rodmell	Offshore	
	Commercial Handliners	South West Handline Fishermen's Association	David Marshall(3)		
Leisure & Tourism	Canoe & Kayak Paddle Sport	Canoe England & British Canoe Union	Andy Davey		
	Leisure Boating	Royal Yachting Association (RYA)	Caroline Price(4)	Inshore	Neil Northmore
	Scuba Diving	Professional Association of Diving Instructors (PADI)	Dale Spree (5)		
	Scuba Diving	British Sub Aqua Club (BSAC)	Jane Maddocks		
	Spearfishing	British Spearfishing Association	Dave Thomasson		
	Recreational Sea Angling	Bass Anglers Sports Fishing Society (BASS) & The Angling Trust Conservation Group	Peter Macconnell		
	Recreational Sea Angling	Brixham Sea Angling Club	Mike Bailey	Inshore	
	Recreational Sea Angling	Cornish Federation of Sea Anglers (CFSA)	Paul Taylor		
	Tourism	South West Tourism	Malcolm Bell(6)		Annette Cole
	Charter Boat Skippers	Offshore Adventure Dive Charter & Professional Boatmen's Association	Rick Parker	Inshore & Offshore	
Commercial & Industry	Aggregates	British Marine Aggregate Producers Association (BMAPA)	Mark Russell		
	Offshore Renewables	Renewable UK	Paul Reynolds(7)		Oliver Wragg

	Offshore Renewables	Regen South West	John Gowdy[8]		Cheryl Hiles
	Regional Development and Economy	South West Regional Development Agency	Colin Cornish[9]	Inshore & Offshore	Jonet Waldock
	Shipping & Ports	British Ports Association	Sandie Wilson[10]		
	Shipping & Ports	British Chamber of Shipping	Adrian Lester		
Conservation	Conservation NGOs	Royal Society for the Protection of Birds (RSPB)	Paul St Pierre	Offshore	Mark Robins
	Conservation NGOs	The Wildlife Trust	Richard White	Inshore	Lissa Goodwin
	Conservation NGOs	Marine Conservation Society (MCS)	Dominic Flint		
	Statutory Conservation (offshore)	Joint Nature Conservation Committee (JNCC)	Beth Stoker	Offshore	
	Statutory Conservation (inshore)	Natural England (NE)	Roger Covey	Inshore	
Owners	Land Owners	The Crown Estate	Andrew Finlay[11]	Offshore	David Tudor
	Land Owners	The Duchy of Cornwall	Christopher Mathews		
Science	Scientific Advisors	Marine Biological Association (MBA)	Olivia Langmead[12]	Inshore	
Statutory Bodies & Local MCZ Groups	Enforcement	Inshore Fisheries and Conservation Authorities	Tim Robbins[13]		Tim Robbins
	Enforcement	Marine Management Organisation	Julian Roberts		
	Environment Agency	Environment Agency	Elly Andison		Martin Williams
	Local MCZ Group	Somerset & North Somerset	Jim Barnard		John Chinn
	Local MCZ Group	Dorset	Bridget Betts		
	Local MCZ Group	Devon	Jim Masters		Stephanie Clark
	Local MCZ Group	Cornwall	Sam Davis		Philippa Hoskin
	Local MCZ Group	Isles of Scilly	Steve Watt		Mike Hicks
Heritage	Historic Environment	English Heritage	Nick Russell	Inshore	
Military	Ministry of Defence	Ministry of Defence	Rod Jones		Susie Norbury

[1] The representative for the Shellfish Association of Great Britain (SAGB) left the Steering Group as of February 2011 and the organisation become a Named Consultative Stakeholder.
(2) Paul Trebilcock replaced Armand Toms in April 2010 to represent the commercial fishing sector in Cornwall.
[3]David Marshall replaced David Bond in April 2010 to represent the commercial handlining sector
(4)Caroline Price replaced Peter Bartlett (Royal Yachting Association) on the Steering Group in February 2011.
(5) Dale Spree replaced Mark Layton in November 2009 to represent the Professional Association of Diving Instructors.
(6) Malcolm Bell replaced Emma Whittlesea in January 2011 to represent the South West tourism industry
(7) Paul Reynolds replaced Peter Madigan in October 2010 to represent Renewable UK
(8) Johnny Gowdy replaced Cheryl Hiles in February 2010 to represent RegenSW
(9) Colin Cornish replaced Jonet Waldock in April 2010 to represent regional economy and development
(10) Sandie Wilson replaced Dick Appleton in June 2010 to represent the ports sector
(11) Andrew Finlay replaced David Tudor in October 2010 to represent the Crown Estate
(12) Olivia Langmead replaced Emma Jackson in July 2010 to represent Marine Science
[13] Time Robbins replaced Keith Bower (Sea fisheries Committees) on the Steering Group in February 2011.

Chairman: Sir Harry Studholme
Regional Steering Group (Members who retired or moved on): Keith Bower, Peter Bartlett, Emma Whittlesea, Tom Pickerell, Dick Appleton, Cheryl Hiles, Peter Madigan, Fiona Wynne,
Substitute Steering Group members: Susie Norberry, David Tudor, Nick Prust, Mark Robins, Oliver Wragg,
Process Group members: Andy Green, Richard White, Dave Cuthbert, Dick Appleton, Jim Masters, Rick Parker

Appendix 3: Local Group membership

Cornwall (Co-ordinated by Sam Davis, Cornwall IFCA):

Name	Organisation	Sector
Nigel Walker		**Independent Chair**
Dave Thomasson	British Spearfishing Association	Spearfishing, recreational diving
Dave Lewis/Jenny Christie	Cornwall Council	Local Authority
Bryn Tapper	Cornwall Council (Archaeological Unit)	Maritime archaeology
Kevin Bennetts/Paul Taylor	Cornish Federation of Sea Anglers	Angling
Paul Trebilcock	Cornish Fish Producers' Organisation	Inshore/offshore fisheries
Steve Kestin	Cornish Mussels	Aquaculture
Jemma Roberts	Cornwall Sustainable Tourism Project	Tourism
Alan Jordan	Cornwall Marine Network	Maritime industries
Ruth Williams/Tom Hardy	Cornwall Wildlife Trust	Conservation
Simon Toms	Environment Agency	Statutory nature conservation
Peter Ghey	Hayle Fishermen's Association	Inshore fishing (North coast)
Terry George	Land's End Fishermen's Association	Inshore fishing (West coast)
Duncan Jones	Marine Discovery Penzance	Wildlife tourism
Andy Banks	Marine & Fisheries Agency	Statutory fisheries regulation
Rob Preston	Mevagissey Fishermen's Association	Inshore fishing (South coast)
Hugh Bowles	Mevagissey Harbour Commissioners	Ports & harbours
Janet Lister	National Trust	Nature conservation/landowner
Paul St. Pierre	Royal Society for the Protection of Birds	Conservation
Sangeeta McNair	Natural England	Statutory nature conservation
John Munday		Angling

Devon (Co-ordinated by Jim Masters, Devon Maritime Forum):

Name	Organisation	Sector
Bill Horner	DCC	Archaeology
Richard White	Devon Wildlife Trust	Biodiversity
Helen Booker	RSPB	Biodiversity
Alex Scholefield	Torbay Coast and Countryside Trust	Biodiversity
Colin Munro	Marine Bio images	Biodiversity
John Hepburn	Maritime Plymouth	Economy and commerce
Brian Pawley	South Devon and Channel Shell fishermen ltd	Commercial fishing
Orme Vince	Commercial Fishing	Commercial Fishing
John Balls		Commercial fishing
Andrew McLeod	McLeod Trawlers Ltd	Commercial fishing
Andy Bell	North Devon Biosphere Reserve	Communities - North Devon
Rose Day	North Devon AONB	Communities - North Devon
Graeme Smith	Teignbridge District Council	Communities - Teignbridge
Jenny Lockett	Exe Estuary Management Partnership	Community - Exeter
Kaja Curry	Plymouth City Council	Community - Plymouth
Nigel Mortimer	South Devon AONB	Community - South Hams
Elaine Hayes	Living Coasts	Community - Torbay
Rick Parker	self employed	Diving
Sally Sharrock	Sea Search	Diving
Jamie Evans	Devon County Council	Economy and commerce
Janet Lister	National Trust	Landowner
Jill Portsmouth	Coastwise	Marine Education
James Chubb	East Devon District Council	Marine Education
Kevin Mowatt	Torbay Council	Ports and Harbours
David Pennington	Self employed	Recreational Sea Angling
Doug Mosedale	Brixham Sea Anglers Club	Recreational sea angling
Peter Wilkins	BASS	Recreational sea angling
Gavin Black	Natural England	Relevant Authority

Randolph Velterop	Royal Haskoning	Renewable Energy
Lynda Rodwell	Marine Institute	Science
Sian Rees	Marine Institute	Science
Charlotte Marshall	Marine Institute	Science
Dr Karen Edwards	Met Office	Science and Research
Isabelle Bromham	North Devon Plus	Watersports and recreation
Bill Horner	DCC	Archaeology
Richard White	Devon Wildlife Trust	Biodiversity
Helen Booker	RSPB	Biodiversity

Dorset (Co-ordinated by Bridget Betts, Dorset Coastal Forum):

Name	Organisation	Sector
Peter Dadds	Mudeford and District Fishermens' Association	Inshore fishing
Robert Channon	Poole and District Fishermens' Association	Inshore fishing
Norman Miller	Independent Fisherman - Representing Lulworth Cove Fishermen	Inshore fishing
Andy Alcock	Dorset Handline Fishermans Association	Inshore fishing
Dave Sales	Bridport Commercial Boatowners and Fishermens' Association	Inshore fishing
Ian Taylor	Dorset Handliners Fishermans Association	Inshore fishing
Alan Lander	Swanage Fishermens' Association ssfc	Inshore fishing
Nigel Stuart Parkinson	Weymouth and Portland Fishermans Association	Inshore fishing
Neil Richardson	Southern Sea Fisheries District Committee	Enforcement
Eamon Riordan	Angling Trust Wessex Group	Recreational sea angling
Peter Tinsley	Dorset Wildlife Trust	Conservation
Fiona McNie	Natural England	Statutory nature conservation
David Cornick	West Bay Sea Angling Club	Recreational sea angling
Colin Smith	Fishfarms	Aquaculture
Randolph Velterop	Royal Haskoning	Planning
Chris Caines	Weymouth and Portland Licensed Skippers Association	Charter boats
Dave Gibson	Weymouth and Portland Licensed Skippers Association	Charter boats
Philip Higgins	Poole Charter Skippers Association / pdfa	Charter boats
Dave Dunn	Royal Yaching Association	Recreational boating
Dave Harlow	Bournemouth borough Council – Coast defence	Local Authority
Emma Perrin	Portland Harbour Authority Limited	Ports and harbours
Joe Miller	Lulworth Cove Fishermen	Inshore fishing
John Ballett		Inshore Fishing
Jon Reed	Boat owners response group	Recreational boating
Justine Jury	Southern Seas Fisheries Committee	Enforcement
Mike Bailey	Netting	Inshore fishing
Ness Smith	CSCOPE Project Officer – Dorset Coast Forum	Local Authority
Tom Russell	Poole and District Fishermen’s Association	Inshore fishing

Isles of Scilly (Co-ordinated by Steve Watt, Isles of Scilly IFCA):

Name	Organisation	Sector
Mike Hicks	Isles of Scilly Sea Fisheries Committee	Local Authority
Angie Gall	Isles of Scilly Wildlife Trust	Environment
Tim Allsop	St. Martin's Diving Services	Diving
Justin Williams	Marine Management Organisation	Statutory Fishing Agency
Craig Dryden	Council of the Isles of Scilly	Chief Planning Officer
Trevor Kirk	Council of the Isles of Scilly	AONB Officer
Dr. Vic Heaney	Council of the Isles of Scilly	RSPB
Sangeeta McNair	Natural England	Environment
Robert Francis	Isles of Scilly Fishermen's Association	Fisherman
Spike Searle	Finding Sanctuary	
Delwyn Thompson		Angling
Nick Jenkins	Isles of Scilly Fishermen's Association	Fisherman
Steve Hicks	St. Mary's Boatmen's Association	Boatman
Cllr Richard McCarthy		Renewable Energy Projects
Harbourmaster	Harbourmaster	Port Authority
Cllr Chris Thomas	Chairman of the Isles of Scilly IFCA	Local Authority
Dale Clark	St Mary's Harbourmaster	Ports and Harbours
Cllr John Goddard	Vice Chairman Isles of Scilly IFCA	Enforcement

Somerset(Co-ordinated by Martin Syvret, Finding Sanctuary):

Name	Organisation	Sector
Jim Barnard	Finding Sanctuary Steering Group member	Chairman
Rebecca Seaman/ Paul Jones	Somerset County Council	Local Authority
Don Holland / John Chinn/ Simon Stroud	Burnham Boat Owners Sea Angling Association	Boat Anglers
Brian Richards	Porlock Weir Marine Aquarium	Marine Education
Christine Marsh/ Paul Parker	Severn Estuary Partnership	Coastal Partnership
Anne Hayes	Environment Manager (Marine Dept.) Bristol Port Company	Ports
Nigel Chaffey	Course Leader (Environmental Science), Senior Lecturer in Physiological Plant Anatomy, Department of Science, Bath Spa University	Science
Angela Lamplough/ Steve Watts	Economy & Climate Change - West Somerset Council	Economy & Climate Change
Don Metcalfe/ Frank Beaugendre	Bristol Channel Federation of Sea Anglers	Recreational Anglers
Toby Catchpole	Archaeology Service, Environment Directorate , Gloucestershire County Council	Archaeology
Rachel Lewis	North Somerset Council	Economy & Regeneration
Lucy Rogers/ Matt Hamilton	Avon Wildlife Trust	Conservation
Michelle Osbourn/ Alison Slade	Somerset Wildlife Trust	Conservation
Richard Archer/ Helen Booker	Somerset & Severn Estuary Conservation Officer, RSPB	Conservation
Nigel Hester	National Trust Countryside Manager	Conservation
Julian Carpenter/ David Shaw	MARINET	Conservation
Nick Michael	Ecologist, Natural Environment Service, Streets and Open Spaces	Ecology
Larry Burrows	Ecology Officer - Spatial Planning, Environment Directorate, Somerset County Council	Ecology
Don Sutherland	Vice Chairman RYA South West	Recreational Boating
Keith Bower/ Tim Robins/ Sarah Clarke	Devon Sea Fisheries (to become the IFCA for this region)	Enforcement
Steve Yeandle/ Dave Roberts	Charter skippers	Charter boats
Randolph Velterop/ Pete Gaches	Environmental Scientist Royal Haskoning	Commercial/ Consultants
Barry Phillip	Natural England - Somerset	Statutory nature conservation
Angus Bloomfield	Maritime Advisor - Severn Estuary Natural England	Statutory nature conservation

John Carter	Somerset County Council	Tourism
Name	**Organisation**	**Sector**
Rob Solomon	Weston Bay Watersports Club	Watersports
Vanessa Straker/ Robert Isles	English Heritage	English Heritage
The following do not attend meetings but are sent the relevant outputs from the meetings for information:		
Graham Wills	Exmoor National Park Authority	Conservation
Simon Ford	Regional Nature Conservation Advisor, Wessex, The National Trust	Conservation

Appendix 4: Named Consultative Stakeholders

SECTOR	SUBSECTOR	ORGANISATION	MEMBER
Leisure & Tourism	Waterskiing	British Water-ski	Rachel Tallon
	Shooting	British Association of Shooting and Conservation (BASC)	Jamie Stewart
	Angling	The Angling Trust	David Mitchell
	Leisure Boating	The Cruising Association	Edward Cartner
	Board sports	Surfers Against Sewage	Andy Cummins
Conservation	Geology and Geomorphology	University of Plymouth	Malcolm Hart
Commercial & Industry	Submarine Cables	UK Cable Protection Committee (UKCPC)	Richard Hill
	Nuclear Power	EDF Energy	Madeline Hodge
	Marine Safety	Trinity House	Thomas Arculus
	Leisure & Industry	British Marine Federation	Brian Clark
Statutory Bodies	Marine Safety	Marine and Coastguard Agency	Helen Croxton
Local Authority		Cornwall Council	Steve Crummay
Commercial Fishing	Commercial Fishing	Irish South and West Producers Organisation	Joyce Novak
	Commercial Fishing	CNP-MEM (Comité National des Pêches Maritimes et des Elevages Marins)	Perrine Ducloy
	Commercial Fishing	MPA Coalition	Dale Rodmell
	Commercial Fishing	Rederscentrale	Tom Craeynest
	Commercial Fishing	Pêcheurs de Manche d'Atlantique	Nolwenn Gace- Rimaud
	Commercial Fishing	Shellfish Association of Great Britain (SAGB)	Tom Pickerell
	Commercial Fishing	Pelagic Regional Advisory Council	Anne-Marie Kats

Named Consultative Stakeholder (NCS) status was set up to allow stakeholders who may not be able to resource attendance at Steering Group meetings to play a less involved role in the decision-making process. They can provide information to the Steering Group in relation to their specialised knowledge and comment on work emerging from the Steering Group. However, they do not have a direct role in the decision-making process, in that they will not be at Steering Group meetings. At key stages they will be asked for their views on the work of the Steering Group and their comments will be recorded.

Appendix 5: Finding Sanctuary Project Team

	Name	Position	Dates	Notes
Management	Tom Hooper	Project Manager	5th January 2005 to 28th October 2011	Initial job title was 'Project Development Officer'
GIS and Planning	Louise Lieberknecht	MPA Planner	30th April 2007 to 28th October 2011	Initial job title was 'MPA Network Development Co-ordinator'
	Shaun Lewin	Senior GIS and Data Specialist	8th October 2007 to 28th October 2011	Initial job title was GIS and Data Officer
	Tom Mullier	GIS and Planning Specialist	1st August 2008 to 28th October 2011	Initial job title was GIS and Data Assistant
	Alana Murphy	GIS and Planning Specialist	12th October 2009 to 31st August 2011	Initial job title was GIS and Data Assistant
	Mitchell Neilly	GIS and Planning Assistant	4th April 2011 to 20th September 2011	
Communications	Joana Smith (née Doyle)	Communications Co-ordinator	3rd November 2008 to 14th January 2011	
	Hannah Carr	Communications Co-ordinator	4th January 2011 to 30th September 2011	
Liaison	Sarah McLintock	Liaison Support Co-ordinator	9th July 2009 – 31st March 2011	
	Spike Searle	Devon Liaison Officer	3rd September 2007 to 23rd June 2008	
		Cornwall Liaison Officer	23rd June 2008 to 19th November 2010	
	Dan Edwards	Dorset Liaison Officer	8th October 2007 to 14th August 2009	
	John Weinberg	Dorset Liaison Officer	21st September 2009 to 31st March 2011	
	Martin Syvret	Somerset Liaison Officer	6th July 2009 to 31st March 2011	Worked on a 25% fte basis
	Dave Murphy	Devon Liaison Officer	23rd June 2008 to 29th July 2011	
	Beth Henshall	Assistant Liaison Officer	16th October 2009 to 2nd April 2010	
	Jeremy Teale	Assistant Liaison Officer	16th October 2009 to 2nd April 2010	
	Jennie Reeves	Assistant Liaison Officer	16th October 2009 to 2nd April 2010	
Economist	Rupert Haines	Project Economist	1st March 2010 to 31st January 2012	
	Andrea Harvey	Assistant Economist	1st June 2011 to 30th September 2011	

Additional support was provided by a number of short-term employees at various stages in the process, these are mentioned in the acknowledgements (appendix 1). Esther Hughes provided significant support in writing the final report, and is mentioned as one of the report authors.

The Finding Sanctuary Stakeholder Process has been designed and facilitated by Rob Angell of R K Partnership Ltd (RKP). Lynn Wetenhall and Jim Welch have supported the facilitation and process design.

Appendix 6: List of abbreviations

Annex I	This refers to features listed on Annex I of the EU Habitats Directive
BGS	British Geological Survey
BMAPA	British Marine Aggregate Producers Association
BSH	Broad-scale habitat
Cefas	Centre for Environment, Fisheries & Aquaculture Science, an executive agency of Defra
CFP	Common Fisheries Policy
CFPO	Cornish Fish Producers Organisation
CO	Conservation Objective
COG	Conservation Objective Guidance
CWT	Cornwall Wildlife Trust
DECC	Department of Energy and Climate Change
Defra	Department for Environment, Food and Rural Affairs
DNC	Developing Network Configuration (a term used frequently over the course of the planning period)
DORIS	Dorset Integrated Seabed Study - a joint project between a number of organisations to map seabed habitats off Dorset. www.dorsetwildlifetrust.org.uk/page283.html
DWT	Devon or Dorset Wildlife Trusts
EA	Environment Agency
EIA	Environmental Impact Assessment
ENG	Ecological Network Guidance - the ecological criteria that the overall MPA network (MCZs plus existing MPAs) has to meet, and that the Finding Sanctuary recommendations have to adhere to. The ENG are published here http://www.naturalengland.org.uk/Images/100608_ENG_v10_tcm6-17607.PDF and an official summary can be downloaded here http://www.naturalengland.org.uk/Images/identifyingMCZs_tcm6-21967.PDF
FOCI	Features of Conservation Importance – habitats and species listed in the ENG.
GCR	Geological Conservation Review
GIS	Geographical Information System (software used to process spatial data and to make maps)
ERCCIS	Environmental Records Centre for Cornwall and the Isles of Scilly
EUNIS L3	EUNIS level 3. The EUNIS habitat classification is a European-scale hierarchical habitat classification system covering terrestrial, freshwater and marine habitats. Level 3 is a very broad level in the hierarchy, and the broad-scale habitats listed in the ENG are defined at EUNIS L3.
FS	Finding Sanctuary
IA	Impact Assessment – In the context of this report, it refers to the IA being carried out by Finding Sanctuary economist, looking at the socio-economic impacts of rMCZs.
IFCA	Inshore Fisheries and Conservation Authority.
IPA	Inshore Potting Agreement (refers to an agreement between fishermen using the area off Start Point in Devon to resolve conflict between fishing gear types, this started as a voluntary agreement and is now a set of fisheries byelaws).
IWG	Inshore Working Group - A subgroup of the Finding Sanctuary Steering Group, which focussed on the detailed planning work for the inshore area (within 12nm) within the wider Finding Sanctuary project boundary. At the end of 2010 it merged

	with the Offshore Working Group to form the Joint Working Group.
JNCC	Joint Nature Conservation Committee
JWG	Joint Working Group - A subgroup of the Finding Sanctuary Steering Group consisting of the Inshore and Offshore Working Groups. Reported to the Steering Group.
KIS-CA	Kingfisher Information Service - Cable Awareness
LG	Local Group – cross-sectoral county-based stakeholder groups providing a local perspective on MCZ planning to the Finding Sanctuary Working Groups
MB102	Defra contract that gathered ecological data for Marine Protected Area projects
MB106	Defra contract that gathered socio-economic data for Marine Protected Area projects
MB5301	Defra contract that gathered data on spawning and nursery grounds
MCA	Maritime and Coastguard Agency
MCZ	Marine Conservation Zone (specific term to denote areas designated under the Marine and Coastal Access Act)
MESH	Mapping European Seabed Habitats project, www.searchmesh.net
MMO	Marine Management Organisation
MoD	Ministry of Defence
MPA	Marine Protected Area (umbrella term relating to any designation)
N2K	Natura 2000, an ecological network of protected areas within the European Union. Includes SACs and SPAs.
NC	Network Configuration
NCS	Named Consultative Stakeholder, a formal status that allowed stakeholders to feedback to the main Steering Group without direct participation in the process.
NE	Natural England
NGO	Non-Governmental Organisation
nm	Nautical mile (not nanometre)
OSPAR	Oslo and Paris Convention for the protection of the marine environments in the North-East Atlantic
ORRAD	Offshore Renewables Resource Assessment and Development project (see PMSS, 2010).
OWG	Offshore Working Group - A subgroup of the Finding Sanctuary Steering Group, which carried out the detailed planning work for the offshore area (outside 12nm) within the wider Finding Sanctuary project boundary. At the end of 2010, it merged with the Inshore Working Group to form the Joint Working Group.
PDF	Portable Document Format, an open standard for document exchange. Some versions allow data layers to be switched on and off
PDG	Project Delivery Guidance
PG	Finding Sanctuary's Process Group
PR	Progress Report
PT	Finding Sanctuary's Project Team
pMCZ	Potential Marine Conservation Zone, a term used during the planning process to refer to sites in the developing network configuration. In this final report, the sites are referred to as rMCZs (recommended MCZs).
RAC	Regional Advisory Council, part of the reform of the Common Fisheries Policy
REC	Regional Environmental Characterisation
rMCZ	Recommended Marine Conservation Zone
RP	Regional Project
rRA	Recommended Reference Area
RSPB	The Royal Society for the Protection of Birds

SAC	Special Areas of Conservation, a designation defined in the European Union Habitats Directive.
SAFFA	Salmon and Freshwater Fisheries Act
SAP	Science Advisory Panel
SG	Steering Group
SNCBs	Statutory Nature Conservation Bodies (e.g. Natural England & JNCC)
SPA	Special Protection Area for Birds, a designation under the European Union Directive Birds Directive
SSSI	Sites of Special Scientific Interest
SWIFA	South-West Inshore Fishermen's Association
TCE	The Crown Estate
TSS	Traffic Separation Scheme
UKSeaMap	Modelled broad-scale habitat data provided by the JNCC
UNCLOS	United Nations Convention on the Law of the Sea
VA	Vulnerability Assessment
VMCA	Voluntary Marine Conservation Area
VMS	Vessel Monitoring System
WGs	Working Groups - subgroups of Finding Sanctuary Steering Group, includes the Inshore, Offshore and Joint Working Groups

Legend (part 1)
MPAs and Broad-scale Habitats

Limits and MCZs

- Finding Sanctuary project area
- 6 nautical mile limit
- 12 nautical mile limit
- Recommended MCZ (rMCZ)
- Zone within a rMCZ
- Recommended reference area (rRA)

Existing MPAs

- Lundy NTZ
- SAC
- SPA
- SSSI (part of MPA network)
- SSSI (not part of MPA network)

Broad-scale Intertidal habitats (EUNIS level 3)

- Coastal saltmarshes and saline reedbeds
- Mosaic of intertidal mud and coastal saltmarshes and saline reedbeds
- Littoral biogenic reefs
- Littoral sediments dominated by aquatic angiosperms
- High energy intertidal rock
- Moderate energy intertidal rock
- Low energy intertidal rock
- Intertidal coarse sediments
- Intertidal sand and muddy sand
- Intertidal mud
- Intertidal mixed sediments

Broad-scale Subtidal habitats (EUNIS level 3)

- Deep-sea bed
- High energy circalittoral rock
- Moderate energy circalittoral rock
- Low energy circalittoral rock
- High energy infralittoral rock
- Moderate energy infralittoral rock
- Low energy infralittoral rock
- Subtidal coarse sediment
- Subtidal mixed sediments
- Subtidal mud
- Subtidal sand
- Subtidal macrophyte-dominated sediment

Legend (part 2)
Species and Habitat FOCI

Habitats of conservation importance (FOCI)

Habitat areas

- Blue Mussel beds
- Estuarine rocky habitats
- Fragile sponge & anthozoan communities on subtidal rocky habitats
- Intertidal underboulder communities
- Maerl beds
- Mud habitats in deep water
- Sabellaria alveolata reefs
- Sabellaria spinulosa reefs
- Seagrass beds
- Sheltered muddy gravels
- Subtidal chalk
- Tideswept communities
- Tideswept channel

Individual habitat records

- Blue Mussel beds
- Estuarine rocky habitats
- Fragile sponge & anthozoan communities on subtidal rocky habitats
- Intertidal underboulder communities
- Maerl beds
- Mud habitats in deep water
- Peat and clay exposures
- Sabellaria alveolata reefs
- Sabellaria spinulosa reefs
- Seagrass beds
- Subtidal chalk
- Tideswept channel

Species of conservation importance (FOCI)

Species areas

- Area of pink seafans (from DORIS survey)

Individual species records

- Trembling sea mat (*Victorella pavida*)
- Sea fan anemone (*Amphianthus dohrnii*)
- Pink sea fan (*Eunicella verrucosa*)
- Sunset cup coral (*Leptopsammia pruvoti*)
- Starlet sea anemone (*Nematostella vectensis*)
- Stalked jellyfish (*Lucernariopsis campanulata*)
- St. John's jellyfish (*Lucernariopsis cruxmelitensis*)
- Kaleidoscope jellyfish (*Haliclystus auricula*)
- Tentacled lagoon worm (*Alkmaria romijni*)
- Lagoon sandworm (*Armandia cirrhosa*)
- Ocean quahog (*Arctica islandica*)
- Fan mussel (*Atrina pectinata*)
- Defolin's lagoon snail (*Caecum armoricum*)
- Lagoon sea slug (*Tenellia adspersa*)
- Native oyster (*Ostrea edulis*)
- Sea snail (*Paludinella littorina*)
- Burgundy maerl paint weed (*Cruoria cruoriaeformis*)
- Grateloup's little-lobed weed (*Grateloupia montagnei*)
- Coral maerl (*Lithothamnion corallioides*)
- Common maerl (*Phymatolithon calcareum*)
- Peacock's tail (*Padina pavonica*)
- Giant goby (*Gobius cobitis*)
- Couch's goby (*Gobius couchi*)
- Long snouted seahorse (*Hippocampus guttulatus*)
- Short snouted seahorse (*Hippocampus hippocampus*)
- Lagoon sand shrimp (*Gammarus insensibilis*)
- Amphipod shrimp (*Gitanopsis bispinosa*)
- Spiny lobster (*Palinurus elephas*)
- Gooseneck barnacle (*Pollicipes pollicipes*)

Legend (part 3)
Socio-Economic Activity

Socio-economic activity

Wrecks

- Charted wrecks (UKHO vector data)
- Protected wreck (archaeological site)
- Protected wreck (military)
- Protected wreck exclusion zone (archaeological site)
- Protected wreck exclusion zone (military)

Dumping and disposal

- Open disposal sites
- Closed and disused disposal sites
- Milford Haven proposed extension to disposal area
- Licenced outfalls (The Crown Estate)
- Location of consented discharge (EA)

Ports, harbours and coastal defence

- Harbour administration regions
- Anchorages, berths & docks
- Anchorages
- Marinas
- Moorings
- Flood or coastal defence structure (EA)
- Coastal protection works (The Crown Estate)

Recreational activity restriction areas

- Studland voluntary no anchor zone
- Swimming area (UKHO vector data)
- Water skiing area (UKHO vector data)

Dredging and Aggregates (The Crown Estate)

- Current dredging license
- Aggregate applications
- Aggregate prospecting or option areas
- Aggregate production licences

Aquaculture Licence (The Crown Estate)

- Current
- Expired
- Pending

Fisheries regulations

- Fishery Order (The Crown Estate)
- Several Order (The Crown Estate)
- Fixed net restrictions (NFFO, DSFC, SSFC, CSFC)
- Midchannel Potting Agreement (NFFO - voluntary)
- Prawns closed season
- Temporary gillnet closure
- Scallops closed season
- Trawling and/or fixed net restriction
- Trevose Box
- NDFA Ray Box

Inshore Potting Agreement (FR_033d and FR_035d)

- Start point: no trawling area
- Trawling 1 Jan - 31 March
- Trawling 1 Jan - 1 June
- Trawling 1 Jan - 31 August
- Trawling 1 - 31 March
- Trawling all year

Renewable energy and cables

- Round 3 windfarm licences
- Planned extent of Atlantic Array
- Eneco wind park planned development area
- WaveHub
- Potential cable routes for Eneco wind park
- Power and telecommunications cables (KISCA)

Appendix 8: GIS data and planning tools

Introduction to appendix 8

The following is a description of the datasets that were used during the planning, and the datasets that were used to calculate statistics in part II of this report. It assumes a working knowledge of the MCZ project and the national datasets that have been gathered by the Defra-funded projects MB102 and MB106.

Some of the ecological datasets were updated during the planning process. We tried to prioritise the updating of our data and maps in such a way that we always had the most up-to-date information to hand when it was most useful - generally within the Working Groups. Originally this information was presented through the regional profile. This was a collection of A4 sized maps and accompanying notes that filled a lever arch file, supplied to the Steering Group as hard copies and electronic copies. However, the regional profile proved too unwieldy as a practical tool to refer to during the meetings, so the project team started to create large (A2-sized) maps to use during the planning meetings. There were frequent data updates, making map changes necessary. The last update to the regional profile was made in June 2010. From then onwards, A2 meeting maps and interactive PDFs took priority, and the regional profile was no longer comprehensively updated. Where possible, readers are advised to refer to our interactive PDFs and Working Group maps (with 'OWG' and 'IWG' codes) in preference to the regional profile maps. The latest versions of these maps are available alongside this report, as part of the additional materials (listed in appendix 14). Any references in the text below to maps with IWG and OWG codes refer to these A2 maps.

Broad-scale habitats

Our maps of EUNIS level 3 broad-scale habitats primarily used data that was provided by the JNCC, who supplied a combined dataset from a number of sources. Over the course of the project, it went through several iterations and updates. At the beginning of Iteration 2, we were working with the same EUNIS level 3 habitat data that we had available for the first Iteration. The dataset was substantially updated over the summer of 2010, and by the end of the second planning Iteration we had a combined dataset, consisting of modelled subtidal habitat data (from the JNCC's UKSeaMap[73] work), survey data from MESH[74] (where this was of sufficient quality to replace the modelled data, shown in map FR_074 at the end of this appendix), and intertidal habitat data from MB102. Corrections to that dataset (which were still outstanding at the time of writing our second progress report) were thought to have been finalised prior to the third progress report, however, data from the South Coast REC (Regional Environmental Characterisation[75],) was also added.

We carried out our own (minor) edits to the combined EUNIS L3 habitat map, mostly in order to correct some small errors in the modelled data along the edge of our study region (small misclassified areas). More significantly, the modelled data showed what we considered to be a spurious patch of 'deep-sea bed' habitat located in the south-west of our study area, on the continental shelf and at a distance from the actual shelf break. This patch came from the UKSeaMap modelled data, which uses 200m depth as a cut-off for the differentiation between the continental shelf habitats (subtidal sand, subtidal mixed sediments etc), and the deep-sea habitat that lies beyond the shelf break. In general terms this works well – on nautical charts in the south-west

[73] http://jncc.defra.gov.uk/page-2117
[74] http://www.searchmesh.net/
[75] www.southcoastrecgis.org.uk/sc/

region, the 200m contour coincides with the location of the shelf break. However, the bathymetry data used by the UKSeaMap model showed an area of a depression below 200m, located on the continental shelf – this is not an area of rapid change in slope. In the modelled outputs, this was classified as 'deep-sea bed'. We reclassified it as the surrounding shelf habitat (subtidal sand) in the dataset that we used during stakeholder meetings and in order to calculate the figures presented here.

For intertidal broad-scale habitat, a significant addition to the JNCC-provided EUNIS L3 data was provided to us in the shape of detailed intertidal habitat data from the Environment Agency (map FR_075). We used a lookup table provided by the EA (here[76]) to reclassify the intertidal habitat types mapped by the EA (IHS, Integrated Habitat System) to EUNIS L3, and amalgamated the resulting polygons with our EUNIS L3 data layer. Where the EA data overlapped with the EUNIS L3 habitat data provided by the JNCC (which was delivered through MB102), we chose the EA data in preference.

The EA intertidal habitat data was of better quality and much more detailed than the information from MB102. However, the EA used a habitat classification (IHS) which differed from the EUNIS habitat classification. A standard translation table exists to translate from IHS to EUNIS, and this was used to convert the EA data to EUNIS L3 habitat data. An important point to note that the IHS classification has a single category for intertidal mud and sand habitats. In the IHS/EUNIS translation table, IHS habitat code LS41 (mudflats and sandflats not covered by sea water at low tide) correlates with EUNIS code A2.3 (intertidal mud). In some areas this resulted in habitat that is known to be intertidal sand and muddy sand being incorrectly labelled as intertidal mud (e.g. some of the sandy surf beaches along the north coast of the study area). Overall, this hasn't affected the ENG targets - both intertidal mud and intertidal sand and muddy sand are adequately covered through existing MPAs and were not habitats that drove the planning process. However, it has led to 'intertidal mud' being listed in the statistics and draft conservation objective tables in some unexpected sites, where the habitat is known to be too exposed for muddy intertidal areas. Where this has happened, it is indicated in the site report.

Our EUNIS L3 habitat data is shown on Working Group maps IWG_09 and OWG_08 (these are A2 Working Group maps), on our interactive biophysical PDF maps, and also on the site maps included within this report. The combined EUNIS dataset was also used at EUNIS level 2 to create the connectivity maps presented in section II.2.8 of the report. A map showing the broad-scale habitat data at EUNIS level 4 is also provided (map FR_076).

The JNCC also provided a detailed biotope map of the Canyons area (Davies *et al.*, 2008) that was used during the planning process and is shown in the biophysical interactive PDF provided with this report, and on the maps in The Canyons rMCZ and recommended reference area site reports.

[76] http://huchitang.pwp.blueyonder.co.uk/ihs-brief-definitions-1-100.htm

Species of Conservation Importance (non-mobile)

Our FOCI species dataset are primarily based on records extracted from the MB102 national data layers. We excluded all records marked as 'uncertain'. In addition to the national MB102 data layers, we were supplied with a number of regional datasets that we added to the MB102 data, creating combined FOCI species and habitat layers. These additional datasets have significantly added to the MB102 data, especially in the Isles of Scilly, along the coast of Cornwall, and in some inshore areas off Dorset. The data is shown on maps IWG_10b and IWG_10c (A2 Working Group maps), the site maps in this report, and on our interactive biophysical PDFs.

During Iteration 2, the combined FOCI data layers included data supplied by the Dorset Environmental Records Centre and Seasearch 2009. For the calculation of the statistics presented in the second progress report, we added further records from the Marine Conservation Society (who provided a small number of additional records of the fan mussel *Atrina pectinata*), from Dorset Wildlife Trust, and from Cornwall Wildlife Trust (who have sent us some of their own records, and those held by the Ecological Records Centre for Cornwall and the Isles of Scilly, including data from recent Seasearch surveys). We also did a brief cross-check between our combined non-mobile FOCI records, and 2009/2010 records in the JNCC's Marine Recorder database. No significant additional data was found to have been added since the completion of the MB102 data gathering contract.

At the start of the third planning Iteration, a final review and update of the combined FOCI datasets was carried out. We added a small number of records from Environment Agency benthic survey data, records provided by Dorset Wildlife Trust, and some data from the DORIS (Dorset Integrated Seabed Study[77]) project provided by Dorset Wildlife Trust. The Seahorse Trust provided us with their local knowledge on the distribution of both species of seahorse, mapped as polygon data via the interactive map (sometimes referred to as 'webGIS'). This data was added to our FOCI maps for use during the planning process. More detailed information on seahorse locations was provided by the Seahorse Trust for relevant site reports.

In response to advice from the SAP, we did not exclude any data on the basis of age of the records. Instead, we mapped the age distribution of the data and wherever possible we have reported data from before 1980 separately.

Overlaps between the different species datasets that we were provided with caused problems, as there was no simple way of identifying duplicate records. The same survey data often appeared to have been entered into two separate databases, but with different unique identifiers, and often with incomplete survey information. Furthermore, the same record, after it was entered into different datasets, will often not plot out on exactly the same location on a map (this is likely to have resulted from geographical transformations or coordinate rounding errors) – mismatches in the order of 10s of metres were common. This meant that the only reliable way of identifying duplicate data was a time-consuming manual cross-check of individual records. Because we had limited time available to spend on this work, we applied the following rules of thumb:

- MB102 data was used as the starting point, against which other data was cross-referenced. Where there are duplicate records, MB102 was used in preference to other sources, having gone through a thorough quality assurance (QA) process and being presented in a standard format with a good level of attribution.

[77] www.dorsetwildlifetrust.org.uk/page283.html

- Data from additional sources was checked against the top copy (in the first instance, MB102). Any records of the same species from the same date that fall within 150 metres of a record already in our dataset were discarded, unless we were certain that they were genuinely separate records. Records that were further apart were removed if we could see a consistent pattern of transformation-induced spatial 'slippage' across a set of records.
- A small number of records we received fell more than 10m landward of the mean high water line on our maps – these were assumed to have erroneous geographical references and were discarded.
- The above steps were carried out one dataset at a time, creating a growing combined dataset that became the top copy against which each successive new dataset was cross-referenced.
- Any data that was flagged as uncertain or which did not have a minimum of a species name, year, and source, was discarded.
-

Because this manual cross-check was a time-consuming task, we implemented a cut-off for accepting any further survey data to be incorporated into the process. No additional datasets were incorporated after January 2011 (species or habitats). It is stated throughout this report where we had knowledge of additional datasets that we were not able to access within the time available.

Habitats of Conservation Importance

The data for habitats of conservation importance consists of point records and polygon data from MB102, survey records provided by Cornwall Wildlife Trust (who have sent us some of their own records and those held by the Ecological Records Centre for Cornwall and the Isles of Scilly, including data from recent SeaSearch surveys), data from the DORIS project and data provided by Dorset Wildlife Trust. We also have additional data for the Isles of Scilly, provided by the Isles of Scilly Local Group, mapped from their local knowledge. The data is shown on maps IWG_11b and IWG_11c (these are A2 Working Group maps).

One aspect of this data that has changed is the working definition of ‘tide-swept channels’. The MB102 data layers included a lot of records labelled ‘tide-swept communities’, and some modelled polygon data showing areas where tidal streams above 7 knots occur in the UK. During the second planning Iteration, we received guidance that the working definition of the listed FOCI should only include records located in the areas where the tidal streams are above 7 knots. On that basis, we removed the data we had previously mapped for this habitat, as none of the MB102 ‘tide-swept communities’ records in the south-west intersected with the mapped polygons. We were provided with recent survey data by Cornwall Wildlife Trust that includes records labelled as the equivalent BAP habitat, located in the Isles of Scilly. The Isles of Scilly Local Group also provided information indicative of tide-swept channels in that area. Within the Isles of Scilly this feature is considered protected within the Isles of Scilly SAC, however this information didn't get added to the national gap analysis and is missing from that report (see appendix 11).

The Environment Agency went to great efforts to provide us with detailed intertidal habitat maps for the south-west coastline. This data was used to supplement the intertidal broad-scale habitat data provided through MB102 (see above). It could possibly have supplemented some of the intertidal FOCI habitat data, but we did not have time to introduce it into the planning process (complex licensing arrangements resulted in receiving the data very late in 2010). The data was supplied before our end-of-year data deadline as a very well-organised series of geodatabases with group layer files. However, the sheer size and complexity of these data sets required a significant amount of processing time.

Additional seagrass bed information was provided through the online interactive map, but this was very limited in scope.

MB102 benthic biodiversity data

The MB102 data contract included benthic biodiversity data layers, designed to help identify areas of additional ecological importance. The data were not available soon enough to be considered during the second planning Iteration, but were reviewed during the third. The datasets include different biodiversity scores (including Chao2 and taxonomic distinctness), presented on a data grid. The grid used for the intertidal area is relatively fine, as this is where the most records are available. The inshore area uses a coarser grid, and the offshore grid is very coarse (and contains so little information that it was disregarded entirely in our process). Exact details of the methods used and the outputs generated can be found in the MB102 reports, and are not repeated here.

For the inshore and the intertidal data, we mapped out the grid cells falling within the top 10 and 25 percentile of each score. We presented two maps, one showing the scores relative to the entire UK dataset (which highlights a lot of the grid cells in our region, as the south-west benthos is diverse within a UK context), and one highlighting the highest scoring grid cells within a south-west context. The latter map was reviewed in detail by the Inshore Working Group during one of their meetings, and some site boundaries were modified to better incorporate diverse areas (refer to the Working Group meeting reports from spring 2011). Benthic biodiversity data from MB102 is included in the biophysical interactive PDF maps.

Late in the process (February 2011) we received new versions of these datasets combining the various different biodiversity measures into areas of low, medium and high benthic biodiversity for species and habitats. These were provided to aid presentation of the data, and were minimally used in the planning process.

Bird foraging ranges

We received information from the RSPB on the kind of habitat utilised for foraging by a number of shore-nesting bird species, as well as information on their known foraging ranges. We also had data from the Seabird 2000 dataset (a survey of shore-nesting birds, indicating the location of colonies and observed counts of breeding pairs within them, from surveys carried out in 2000). Using the RSPB information on known foraging ranges, we created buffers around the location of the colonies within the Seabird 2000 dataset for a number of nesting species, thereby mapping an indicative foraging area. We then used the RSPB's knowledge on foraging habitat type (substrate type, depth, frontal areas) to overlay the buffers with areas that might be suitable for foraging for the different species, using information such as the MB102 sea surface temperature fronts data, EUNIS level 3 habitat data, and bathymetry. These maps are IWG_21 to IWG_25, and IWG_31.

Offshore bird observation / aggregation areas

The JNCC provided us with data extracted from the European Seabirds at Sea (ESAS) dataset, which is data collated from survey work carried out over several decades, corrected for sampling intensity on a grid. The data extracts we were given were the top 25% grid cells for each species in terms of average densities observed during the breeding and wintering seasons, plus the average density values for those grid cells. These data have been summed across species for the two seasons, and mapped to create an overall rough indication of the areas where the highest densities are observed across all species combined. This data is on maps OWG_15 and OWG_16 (these are A2 Working

Group maps). We were supplied with an updated version of this, consisting of the full dataset, however following the guidance from the JNCC regarding designation of offshore rMCZs for birds, these maps were not updated.

Frontal systems

Data on frontal systems can be used as a surrogate for pelagic productivity, and we have used the data supplied with MB102 to create maps of locations of persistent seasonal fronts. Persistent summer fronts are mapped on OWG_10; and the location of the strongest persistent fronts in all four seasons on map OWG_11 (these are A2 Working Group maps).

Cetaceans and basking sharks

During the third planning Iteration, we took along additional information on the distribution and sightings of marine megafauna. That includes a map of basking shark sightings which we created from Marine Conservation Society sightings data (map OWG_38). Given constraints on our time, and the fact that these features are not specifically mentioned in the ENG, we relied mainly on mapped products created by other organisations, i.e. the JNCC's cetaceans atlas, and the recent report by the Whale and Dolphin Conservation Society on areas of importance for cetaceans.

Areas of additional pelagic ecological importance

Towards the end of the planning process we received a data layer showing areas of additional pelagic ecological importance (APEI). This layer was created from several NGO datasets (basking shark sighting data, marine mammal important areas, seabird foraging radii) and two data layers from the JNCC (spawning and nursery grounds and oceanic thermal fronts). A combined score was generated from these and can be seen in map FR_081. As the combined APEI dataset was received late in the planning process (December 2010), it had a limited effect on the final network configuration.

Mobile FOCI

The Environment Agency provided us with detailed evidence on the importance of estuaries for spawning and nursery habitats and for mobile FOCI (eels and smelt). This was referred to during discussions around which estuaries to include as rMCZs. The Environment Agency information was detailed, and a dossier of evidence was provided for each estuary in the region. The information is supplied with the additional materials listed in appendix 14.

The scale of the mobile FOCI data provided through MB102 was considered too coarse to use during planning, a map demonstrating this is provided (FR_078).

Local ecological data

Both the Isles of Scilly Local Group and the North Devon Biosphere Reserve marine Working Group provided additional ecological information to be used during the process. The Isles of Scilly Local Group supplied evidence supporting their recommended areas (photographs and site descriptions, these were shared with the SAP after progress report 2). This information was not digitised and included in the GIS dataset as the amount of time required was prohibitive. The North Devon Biosphere Reserve marine Working Group supplied site descriptions and map fragments in support of their recommendations around the north Devon coast. These materials are provided alongside this report as described in appendix 14.

Datasets not used in the planning process

We received two datasets from the national data contracts which we reviewed and discussed, both within the project and cross-regionally, and which were not used in the planning process. They are the MB102 data on mobile FOCI (which is very coarse scale) and MB102 data on spawning and nursery areas (which, again, is too broad-scale to be meaningful in our planning context, see map FR_079).

Survey work by the Wildlife Trusts has been ongoing throughout this project, though not all of it was available during the planning process. Additional information can be obtained from Cornwall and Isles of Scilly Wildlife Trust/ the Environmental Records Centre for Cornwall and the Isles of Scilly, Devon Wildlife Trust/Devon Environmental Records Centre, Dorset Wildlife Trust/Dorset Environmental Records Centre and Somerset Environmental Records Centre.

Data gathering and planning tools

Online Interactive Map (WebGIS)

In order to collect information from commercial fishers who did not have time to complete a map-based interview with a Liaison Officer, an online interactive Geographic Information System (interactive map or webGIS) was developed with Exegesis Spatial Data Management and launched in July 2008.

In spring 2009 the tool was expanded to accommodate other sea users. This system allowed the project to gather information from those sea users from outside the region as well as from sea users who had not met with a liaison officer. In November 2009 the tool was managed nationally to service all four regional projects and act as a public information source for distributing information on how the network was progressing.

Excel planning tool

Tom Mullier, one of the GIS specialists at Finding Sanctuary, developed an interactive planning tool, which allowed us to calculate the amount of EUNIS level 3 habitat and FOCI records within a selected set of building blocks automatically during the Working Group meetings. The tool incorporated figures from the gap analysis for the existing sites, so it was able to provide an indication of how well a given configuration of sites would perform against these aspects of the ENG. This tool proved to be very useful for speeding up progress during the Working Group meetings, as it allowed stakeholders to swap selected building blocks and get instant feedback, rather than having to wait for the project team to carry out time-consuming GIS analyses at every point.

An updated version of this tool was also used during the reference area planning process to measure how well different combinations of recommended reference areas met the ENG, including how the minimum dimension of sites affected the viability of the species and habitats within it. This proved to be invaluable during the reference area discussions, providing instant feedback and minimising delays.

Interactive PDFs

We created interactive PDF maps that can include multiple, switchable, layers of information. This proved effective during planning, particularly in the discussions around reference areas. This

approach, to some extent, replaced the need for large numbers of hard copy maps to be used during planning meetings.

Socio-economic and basemap data sources

The following indicates the sources of socio-economic and base map datasets used by the project. It is not a comprehensive description of the data used.

UKHO data
UK Hydrographic Office data was initially provided through SeaZone Solutions Ltd. As well as data mentioned specifically below, this dataset included maritime boundaries, charted depth and named sea areas, recreational activity restrictions, mooring locations, anchorages, berths and docks, harbour administration regions and traffic separation schemes.

Protected Wrecks
Information on protected wrecks was provided by English Heritage and the Maritime and Coastguard Agency.

Outfalls and discharge points
The locations of consented discharge points were provided by the Environment Agency. The Crown Estate provided the locations of the outfall licenses that they owned.

Renewables
Round three offshore wind licenses were provided by The Crown Estate. Eneco provided GIS data describing the Eneco wind park area and potential cable corridors in the West of Wight area. Later in the process, Eneco provided data describing a preferred area where offshore wind and MCZs could be co-located. RWE nPower provided information describing the Atlantic Array offshore wind area. The WaveHub exclusion zone was provided by Plymouth University. The associated cable route was supplied by the Marine Operations Manager for WaveHub, for internal research use only. Outputs from the Offshore Renewables Resource Assessment and Development (ORRAD) project describing potential renewable resource areas was provided by the South West RDA (see PMSS, 2010).

Cables
Existing submarine cable routes were downloaded from the KISCA (Kingfisher Information Service - Cable Awareness Charts) website. Cables relating to renewables installations are described above. Additional information on cables was referred to by The Crown Estate representative during planning meetings, but this was not available as GIS data for the project.

Aggregates
Information on aggregate extraction licensing, historical use and potential future development was provided by The Crown Estate.

Ports and related activities
Port of Bristol dredged areas were supplied as a CAD drawing by the Bristol Port Company. Dredging licenses were provided by The Crown Estate. RYA marinas were provided as part of the Royal Yachting Associations Coastal Atlas. Milford Haven Port Authority provided information on dredge disposal site LU169 and potential future extensions.

Fisheries restrictions

- The Start Bay no trawl area, Start Point IPA and Lundy NTZ boundaries were supplied by Devon Sea Fisheries Committee.
- Fixed Net Restrictions (Section 6 Salmon Act 1975) and other trawling and fixed net restrictions were supplied by Cornwall and Devon Sea Fisheries Committees.
- Where a coastline was included, this was digitised by Finding Sanctuary using the Ordnance Survey Boundary-Line mean high water mark as a reference.
- The Midchannel Potting Agreement, Prawns Closed season and Scallops closed season were digitised by Finding Sanctuary from descriptions of the Byelaws in the NFFO yearbook.
- Temporary Gill net closures were supplied by the Cornwall Sea Fisheries Committee.
- The Trevose box was digitised by Finding Sanctuary from European Union document EC 40/2008.
- The NDFA Ray Box was digitised from illustration provided by J.Butterwith of the North Devon Fishermen's Association.

Fisheries use (other than FisherMap)

Vessel monitoring system data was supplied through Defra-led contract MB106. This originally consisted of amalgamated UK and EU data from 2006 and 2007. A later update split the data into different countries and added 2008 and 2009. Inshore fishing data around Cornwall was supplied by the Cornish Fish Producers Organisation.

Base mapping data

The Ordnance Survey mean high water mark was used as the landward component of the Finding Sanctuary study area. This was originally licensed from the OS and later through Defra's OS licensing. This dataset is now part of the OS OpenData project and can be freely downloaded from their website. Land basemapping consisted of OpenStreetMap data, outputs from a collaborative project to create free mapping resources (licensed under Creative Commons, CC-BY-SA), UKHO vector data and the NOAA World Vector Shoreline.

Map: FR_074

Version: 6Sep11

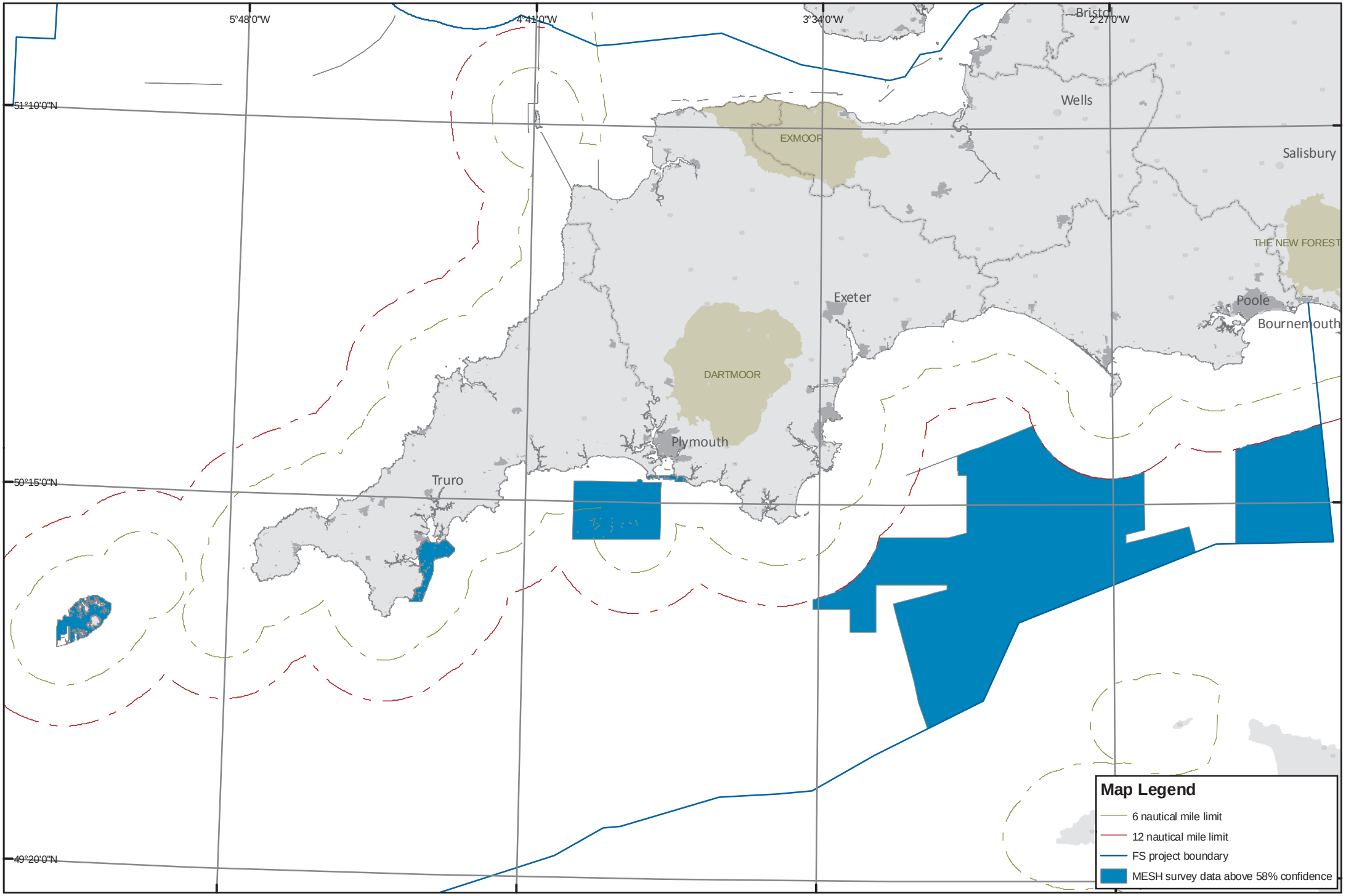
Extent of MESH survey data with confidence of at least 58%

This map shows the extent of the Mapping of European Seabed Habitats (MESH) data that contributed to the combined broad-scale habitats dataset. Datum: WGS84; Projection: UTM30N.

0 25 50 km

N

FINDING SANCTUARY



Map: FR_075

Version: 6Sep11

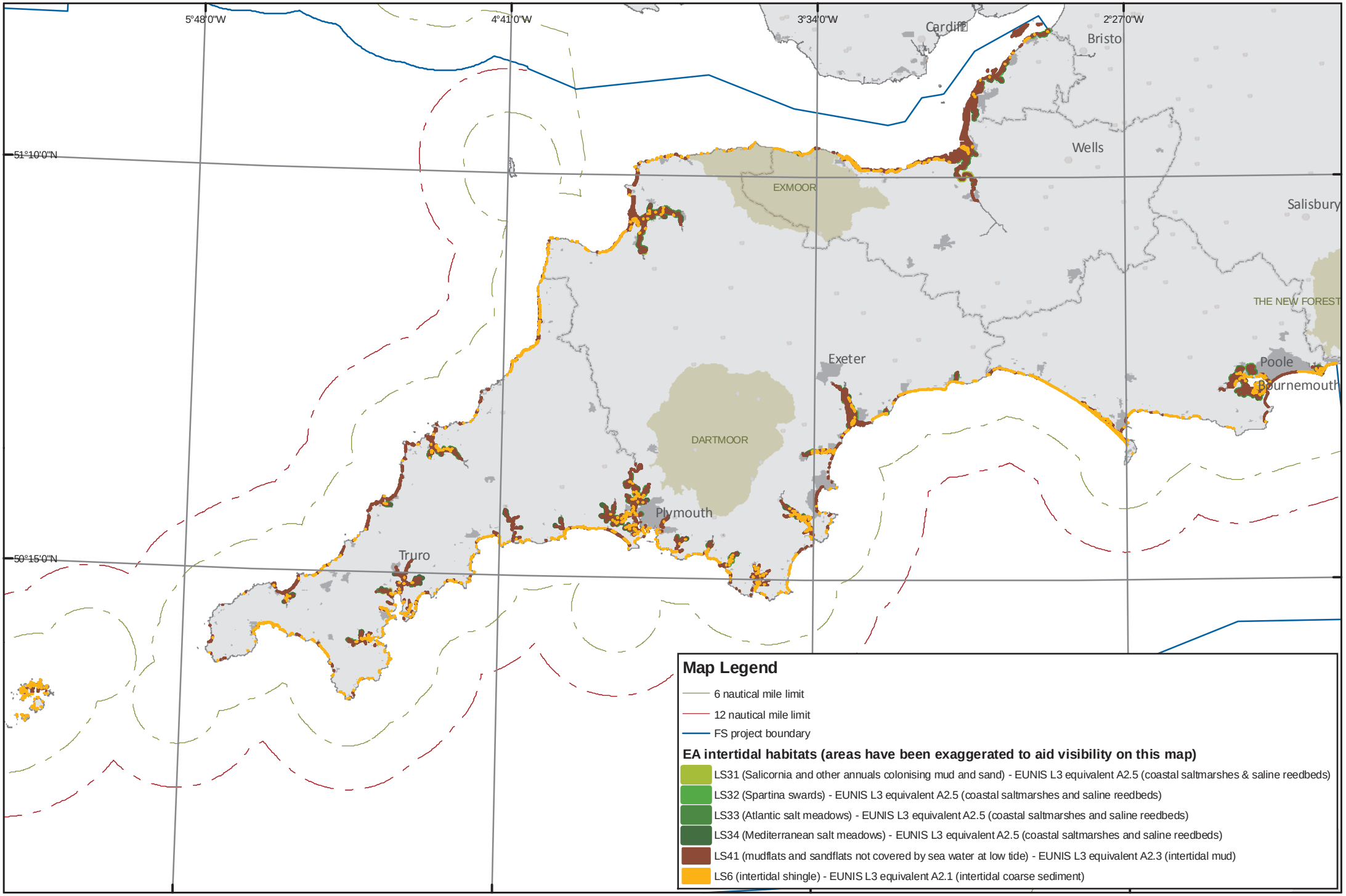
Extent of relevant Environment Agency intertidal habitat data

This map shows the extent of the relevant intertidal habitats that were provided by the Environment Agency. Habitats are shown as IHS biotopes with the corresponding EUNIS level 3 habitat type. Datum: WGS84; Projection: UTM30N.

0 25 50 km

N

FINDING SANCTUARY



Map Legend

- 6 nautical mile limit
- 12 nautical mile limit
- FS project boundary

EA intertidal habitats (areas have been exaggerated to aid visibility on this map)

- LS31 (Salicornia and other annuals colonising mud and sand) - EUNIS L3 equivalent A2.5 (coastal saltmarshes & saline reedbeds)
- LS32 (Spartina swards) - EUNIS L3 equivalent A2.5 (coastal saltmarshes and saline reedbeds)
- LS33 (Atlantic salt meadows) - EUNIS L3 equivalent A2.5 (coastal saltmarshes and saline reedbeds)
- LS34 (Mediterranean salt meadows) - EUNIS L3 equivalent A2.5 (coastal saltmarshes and saline reedbeds)
- LS41 (mudflats and sandflats not covered by sea water at low tide) - EUNIS L3 equivalent A2.3 (intertidal mud)
- LS6 (intertidal shingle) - EUNIS L3 equivalent A2.1 (intertidal coarse sediment)

Map: FR_076

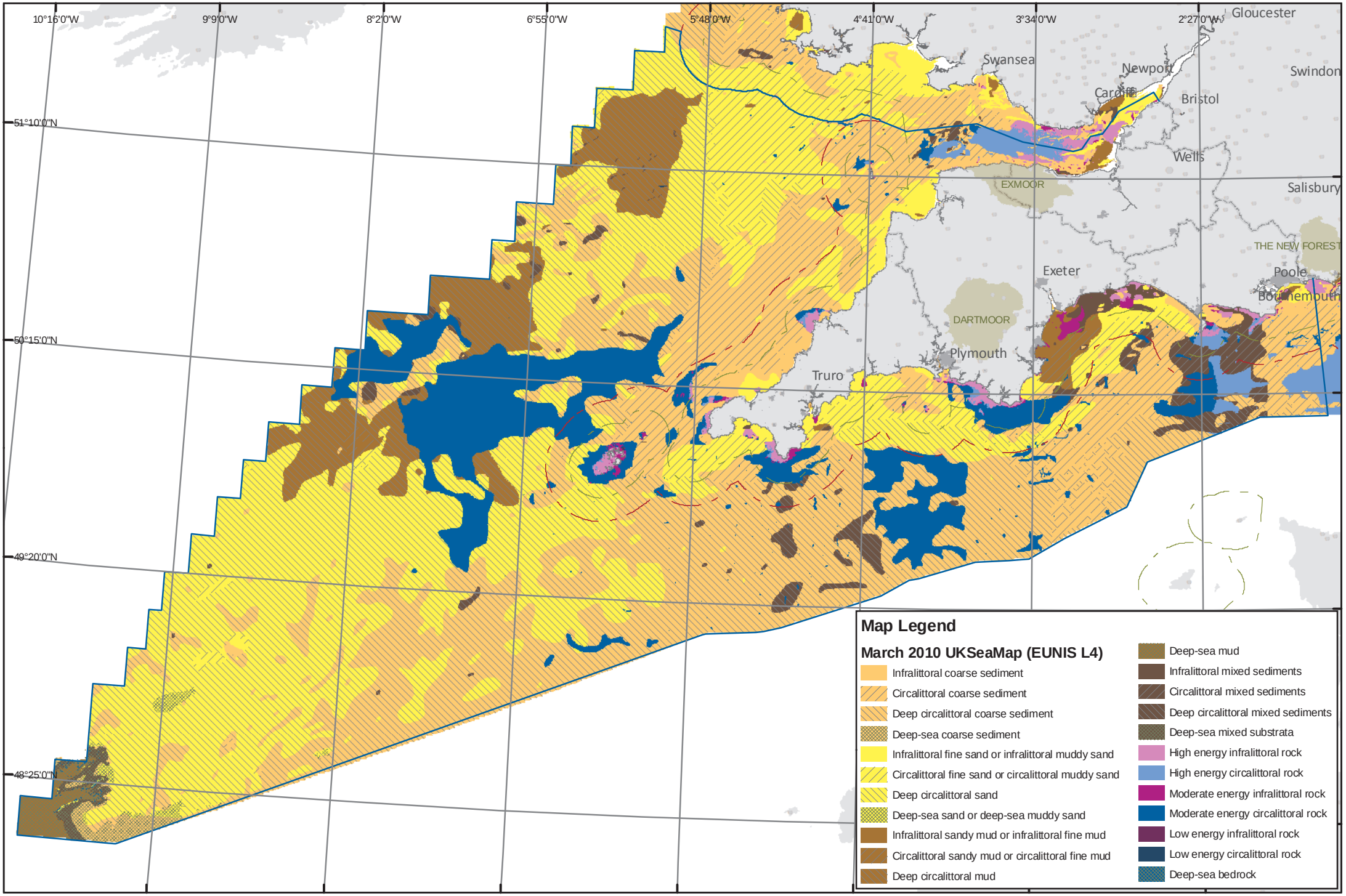
Version: 6Sep11

Broad-scale habitats mapped at EUNIS level 4 (where possible)

This map shows broad-scale habitats at EUNIS L4 (where possible) as mapped in the June 2010 version of the regional profile. The underlying data is the March 2010 version of UKSeaMap. Datum: WGS84; Projection: UTM30N.

0 50 100 km N

FINDING SANCTUARY



Map: FR_077

Version: 6Sep11

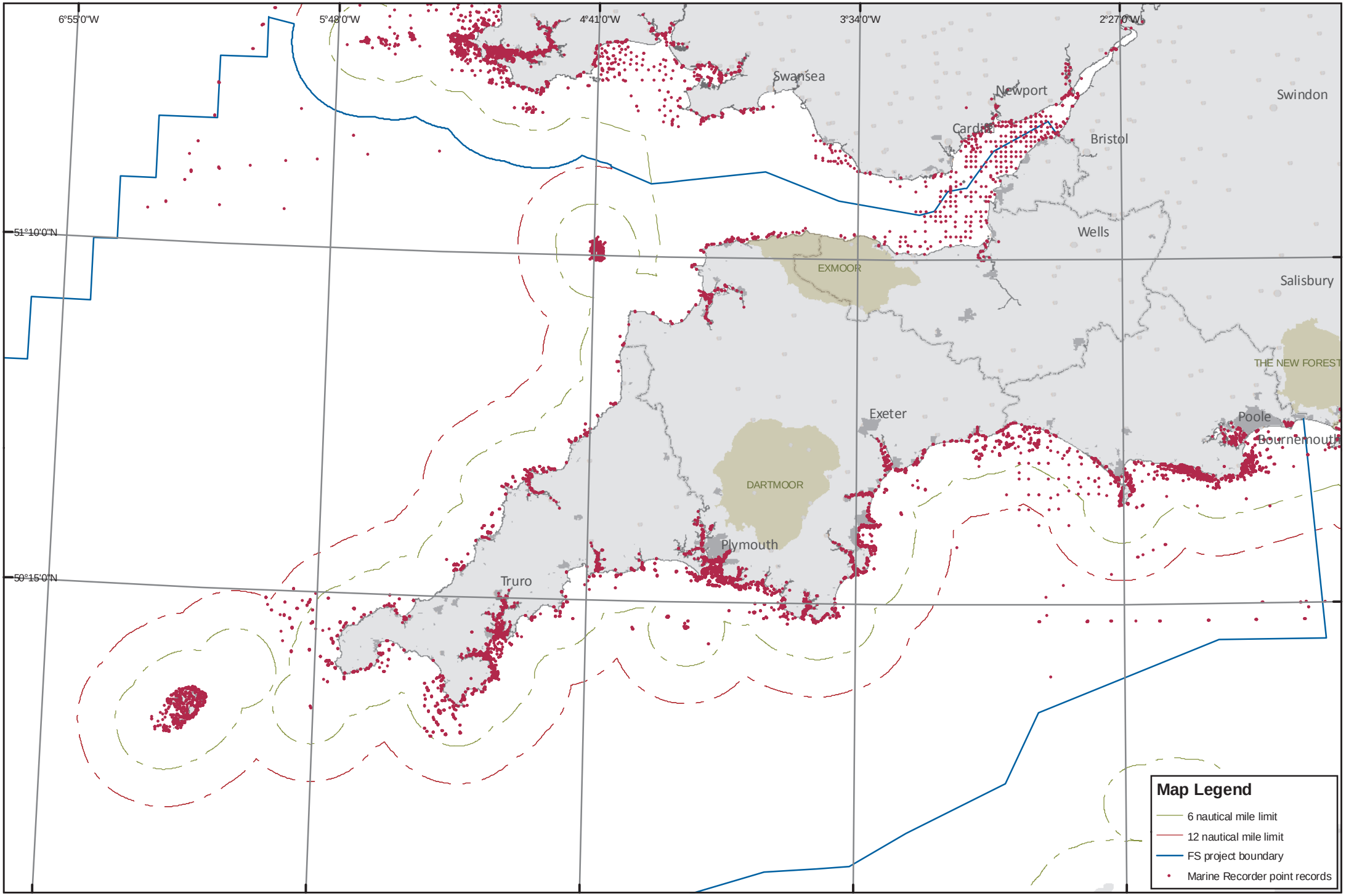
Distribution of Marine Records records (snapshot taken January 2011)

This map shows the distribution of Marine Recorder records from a snapshot taken in January 2011. Datum: WGS84; Projection: UTM30N.

0 30 60 km

N

FINDING SANCTUARY



Map: FR_078

Version: 6Sep11

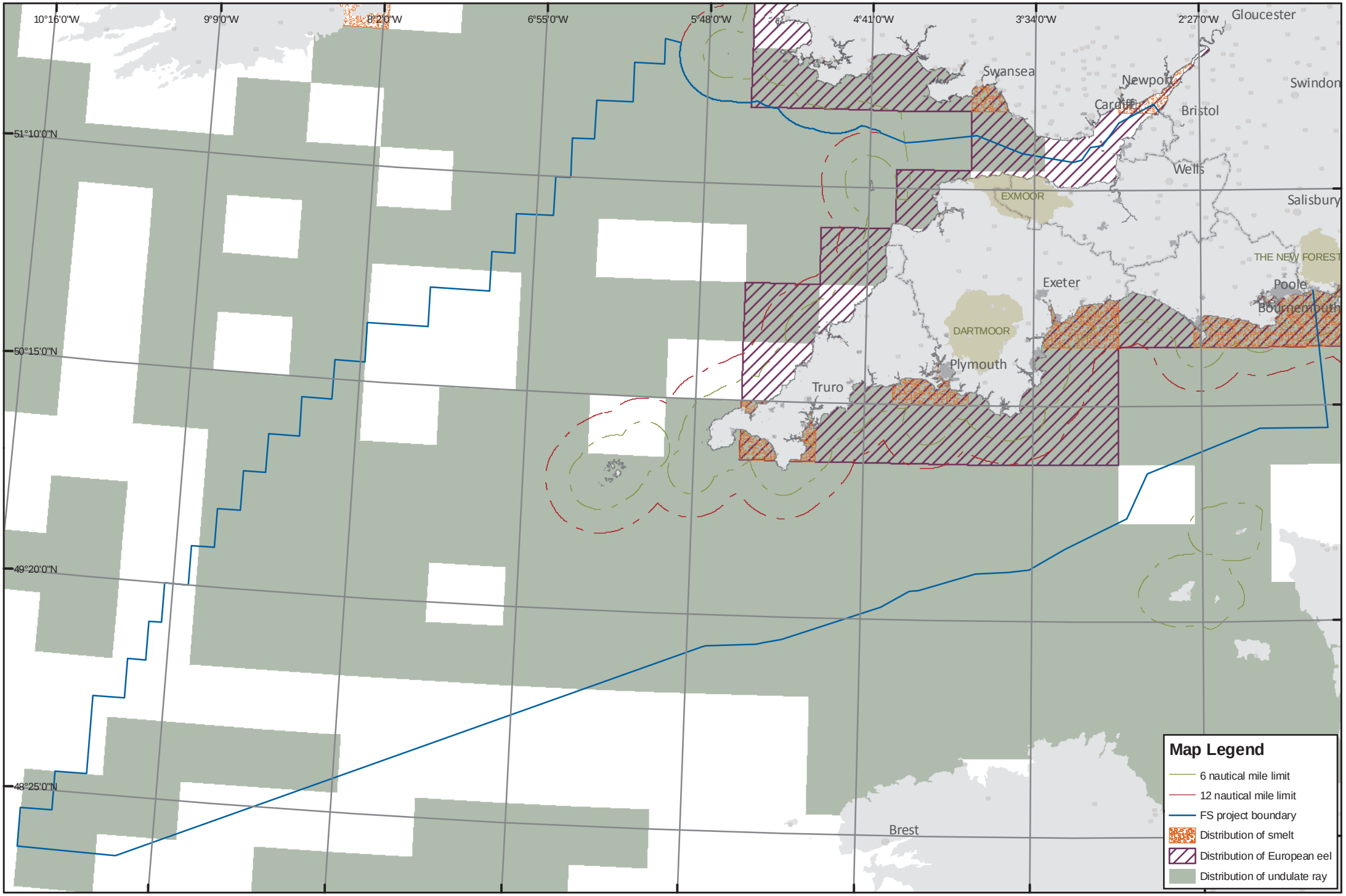
Distribution of mobile species

This map shows data on the distribution of mobile FOCI species from MB102 task 2B. Both current and historic smelt records are included on this map. Datum: WGS84; Projection: UTM30N.

0 50 100 km

N

FINDING SANCTUARY



Map: FR_079

Version: 6Sep11

Example of nursery and spawning data from MB5301 (mackerel)

This map shows the nursery and spawning grounds for a single species (mackerel) extracted from the data provided through Defra led project MB5301. The coarse scale of the data limited its usability in the planning process. Datum: WGS84; Projection: UTM30N.

0 50 100 km N

FINDING SANCTUARY

10°16'0"W 9°9'0"W 8°2'0"W 6°55'0"W 5°48'0"W 4°41'0"W 3°34'0"W 2°27'0"W

51°10'0"N 50°15'0"N 49°20'0"N 48°25'0"N

Gloucester Swansea Newport Swindon Cardiff Bristol Wells EXMOOR Salisbury THE NEW FOREST Exeter Poole Bournemouth DARTMOOR Plymouth Truro Brest

Map Legend

- 6 nautical mile limit
- 12 nautical mile limit
- FS project boundary
- Mackerel spawning grounds
- Mackerel nursery grounds

Appendix 9: References and bibliography

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Appendix 10: Draft reference area guidance table

The table below is an A4-scaled representation of larger tables that were used at planning meetings to capture stakeholder narrative for recommended reference areas. The content is based on the draft reference area guidance.

Extractive and Depositional Activities which will not be allowed in any reference areas			
	Activity	**Type**	**Comments / Implications for potential reference area:**
1	**Aquaculture**	extractive & depositional	
2	**Beachcombing**	extractive	
3	**Catch-and-release angling**	extractive & depositional	
4	**Collection of flora and fauna**	extractive	
5	**Collection of natural substrates / materials**	extractive	
6	**Commercial fishing**	extractive & depositional	
7	**Construction of structures**	extractive & depositional	
8	**Dredging**	extractive	
9	**Marine curio collection**	extractive	
10	**Military activities**	extractive & depositional	
11	**Petroleum / gas exploration**	extractive & depositional	
12	**Petroleum / gas operation**	extractive & depositional	
13	**Recreational angling**	extractive & depositional	
14	**Deposition of gravel / rock**	depositional	
15	**Disposal of dredge spoil**	depositional	

Potentially damaging or disturbing activities that might need mitigation, restriction or complete exclusion from reference areas				
	Activity	**More specific examples where activity may cause a problem**	**Possible mitigation**	**Comments / Implications for potential reference area:**
1	Anchoring / mooring	Where sensitive habitats are present such as seagrass beds and biogenic reefs	Restrictions on anchoring, moorings, code of conduct	
2	Low flying aircraft	Noise or visual disturbance to wildlife or visitors	Restrictions on low-flying activity	
3	Maintenance and operation of existing structures	Mortality of seabirds during windfarm operation	Mitigation unlikely to be possible, so activity probably incompatible with reference area	
		Removal of large decommissioned structures	Mitigation unlikely to be possible, so activity probably incompatible with reference area	
		Disturbance to wildlife from electromagnetic fields	Deep burial of cables, no new cables once reference area in place	
4	Motorised boating	Noise disturbance or physical impact on species such as cetaceans, seals	Seasonal closures, code of conduct, speed restrictions	
		Noise disturbance or physical impact on wildlife with dependent young	Seasonal closures, code of conduct, speed restrictions	
		Anchoring in sensitive habitat	Provision of moorings, zoning	
5	Navigation / transit of vessels	Noise disturbance or physical impact on species such as cetaceans, seals	Appropriate speed restrictions	
		Noise disturbance or physical impact on wildlife with dependent young	Appropriate speed restrictions	
		Visual disturbance during wildlife breeding / feeding / resting times	Speed restrictions, restricted access	
6	Non-motorised boating	Visual disturbance during wildlife breeding / feeding / resting times	Code of conduct, seasonal restrictions	
7	Other recreational pursuits	Dog walking - disturbance to wildlife	seasonal closures, code of conduct, zoning	
		Dog walking - faeces	Must be removed, waste disposal facilities, zoning	
		Horse riding - disturbance to	seasonal closures, code of	

		wildlife	conduct, zoning	
		Horse riding - disturbance to sensitive habitats	Restricted access, zoning	
		Surfing / Kitesurfing / kayaking - disturbance to wildlife	seasonal closures, code of conduct, zoning	
		Surfing / Kitesurfing / kayaking - disturbance to sensitive habitats	Restricted access, zoning	
8	Personal water craft	Visual disturbance during wildlife breeding / feeding / resting times	Spatial and temporal restrictions	
		Noise disturbance or physical impact on species such as cetaceans, seals	Mitigation unlikely to be possible, so activity probably incompatible with reference area	
		Noise disturbance or physical impact on wildlife with dependent young	Mitigation unlikely to be possible, so activity probably incompatible with reference area	
		Damage to sensitive habitats by scour / wash / propellers	Zoning	
		Anchoring in sensitive habitat	Provision of moorings, zoning	
9	Point source discharges	All circumstances	Mitigation unlikely to be possible, so activity probably incompatible with reference area (draft guidance also states 'treatment of effluent appropriate to sensitivities of the habitats and species')	
10	Ports and harbours	Disturbance to sensitive habitats and species from shipping activity e.g. Noise, visual disturbance and wash	Mitigation unlikely to be possible, so activity probably incompatible with reference area	
		Release of chemicals into marine environment	Re-positioning of boat cleaning areas away from reference area, careful disposal of contaminants	
11	Scientific research and education	Damage to sensitive habitats e.g. By trampling or use of towed sampling gear / grab sampling	Code of conduct	
		Disturbance to sensitive species such as cetaceans / seals	Code of conduct	
		High numbers of people	Code of conduct	
		Extraction or removal of species for research	To be performed only under permit	
12	Scuba diving	High numbers of divers /	Permits to regulate numbers,	

	and snorkelling	snorkellers - trampling / sediment stirring / abrasion Low skill level of divers Presence of sensitive wildlife or habitats High numbers of boats - anchoring, noise and visual disturbance	code of conduct, zoning Signs and leaflets to raise awareness located at shore access points or dive centres; specified areas for beginners, zoning Seasonal closures, code of conduct Permits to regulate numbers	
13	Swimming	Trampling of sensitive intertidal populations Disturbance to sensitive species such as cetaceans / seals	Demarcation of acccess points Code of conduct, zoning	
14	Vehicular access	Sensitive populations / habitats in intertidal zone	Specified access routes	
		Noise / disturbance during wildlife breeding / feeding / resting times	Mitigation unlikely to be possible, so activity probably incompatible with reference area and will be restricted during these times	
15	Visitor amenities / camping	Effects of construction works for visitor amenities Increased waste or litter	Minimal construction of facilities, placed away from reference area Site facilities away from reference area, code of conduct in place, educational boards	
16	Walking / hiking	Trampling of sensitive intertidal populations Erosion of intertidal habitats	Access restrictions Well marked paths, code of conduct	
17	Wildlife observation	High numbers of boats - noise and visual disturbance to wildlife populations Noise / disturbance during wildlife (e.g. Seals, cetaceans, birds) breeding / feeding / resting times	Permits to regulate numbers, code of conduct and accreditation schemes code of conduct	
		Harassment of wildlife	code of conduct	

Appendix 11: Gap Analysis table

Broad-scale habitats and FOCI protected in existing marine protected areas

Name	Type	Broad-scale habitats protected	FOCI protected
Braunton Burrows	SAC		
Chesil & The Fleet	SAC	intertidal coarse sediment intertidal sand and muddy sand intertidal mud Intertidal mixed sediments Coastal saltmarshes and saline reedbeds Subtidal coarse sediment Subtidal macrophyte-dominated sediment	Seagrass beds Subtidal sands and gravels *Armandia cirrhosa* *Caecum armoricum* *Alkmaria romijni* *Nematostella vectensis* *Gammarus insensibilis* *Tenellia adspersa* *Paludinella littorina*
Fal & Helford	SAC	Moderate energy intertidal rock Low energy intertidal rock Intertidal coarse sediment Intertidal sand and muddy sand Intertidal mud Intertidal mixed sediments Coastal saltmarshes and saline reedbeds High energy infralittoral rock Moderate energy infralittoral rock Low energy infralittoral rock Moderate energy circalittoral rock Low energy circalittoral rock Subtidal coarse sediment Subtidal sand Subtidal mud Subtidal mixed sediments Subtidal macrophyte-dominated sediment	Intertidal underboulder communities Maerl beds Seagrass beds Sheltered muddy gravels Estuarine rocky habitats Fragile sponge and anthozoan communities on subtidal rocky habitats *Lithothamnion corallioides* *Ostrea edulis* *Phymatolithon calcareum* *Eunicella verrucosa*
Haig Fras	SAC	Moderate energy circalittoral rock Fragile sponge and anthozoan communities on subtidal rocky habitats	
Isle of Portland to Studland Cliffs	SAC		
Isles of Scilly Complex	SAC	Moderate energy intertidal rock Intertidal sand and muddy sand High energy infralittoral rock Moderate energy infralittoral rock Low energy infralittoral rock High energy circalittoral rock Moderate energy circalittoral rock Low energy circalittoral rock Subtidal coarse sediment Subtidal sand Subtidal mixed sediments	Intertidal underboulder communities Seagrass beds Subtidal sands and gravels Fragile sponge and anthozoan communities on subtidal rocky habitats Subtidal macrophyte-dominated sediment Intertidal sediments dominated by aquatic angiosperms *Leptopsammia pruvoti* *Eunicella verrucosa*
Land's End and Cape Bank	SAC	High energy infralittoral rock Moderate energy infralittoral rock	Fragile sponge and anthozoan communities on subtidal rocky

		High energy circalittoral rock Moderate energy circalittoral rock	habitats
Lizard Point	SAC	High energy infralittoral rock Moderate energy infralittoral rock High energy circalittoral rock Moderate energy circalittoral rock	Fragile sponge and anthozoan communities on subtidal rocky habitats *Eunicella verrucosa*
Lundy	SAC	Moderate energy intertidal rock High energy infralittoral rock Moderate energy infralittoral rock High energy circalittoral rock Moderate energy circalittoral rock Low energy circalittoral rock Subtidal coarse sediment Subtidal sand	Intertidal underboulder communities Fragile sponge and anthozoan communities on subtidal rocky habitats *Leptopsammia pruvoti* *Eunicella verrucosa* *Amphianthus dohrnii*[1]
Lyme Bay and Torbay	SAC	High energy infralittoral rock Moderate energy infralittoral rock Low energy infralittoral rock High energy circalittoral rock Moderate energy circalittoral rock Subtidal biogenic reefs	Blue Mussel beds (including intertidal beds on mixed and sandy sediments) ~~Ross worm (*Sabellaria spinulosa*) reefs~~[1] Fragile sponge and anthozoan communities on subtidal rocky habitats *Leptopsammia pruvoti* *Eunicella verrucosa*
Plymouth Sound & Estuaries	SAC	High energy intertidal rock Moderate energy intertidal rock Low energy intertidal rock Intertidal sand and muddy sand Intertidal mud Intertidal mixed sediments Coastal saltmarshes and saline reedbeds High energy infralittoral rock Moderate energy infralittoral rock Low energy infralittoral rock High energy circalittoral rock Moderate energy circalittoral rock Low energy circalittoral rock Subtidal coarse sediment Subtidal sand Subtidal mud Subtidal mixed sediments Intertidal sediments dominated by aquatic angiosperms Subtidal macrophyte-dominated sediment	Intertidal underboulder communities Seagrass beds Sea-pen and burrowing megafauna communities Subtidal chalk Subtidal sands and gravels Estuarine rocky habitats Fragile sponge and anthozoan communities on subtidal rocky habitats *Eunicella verrucosa*
Prawle Point to Plymouth Sound & Eddystone	SAC	High energy infralittoral rock Moderate energy infralittoral rock High energy circalittoral rock Moderate energy circalittoral rock	Fragile sponge and anthozoan communities on subtidal rocky habitats *Leptopsammia pruvoti* *Eunicella verrucosa*
Prawle Point to Plymouth Sound & Eddystone extension	SAC	High energy infralittoral rock Moderate energy infralittoral rock High energy circalittoral rock Moderate energy circalittoral rock	Fragile sponge and anthozoan communities on subtidal rocky habitats *Leptopsammia pruvoti*

			Eunicella verrucosa
Severn Estuary	SAC	Moderate energy intertidal rock Low energy intertidal rock Intertidal coarse sediment Intertidal sand and muddy sand Intertidal mud Coastal saltmarshes and saline reedbeds Intertidal biogenic reefs High energy infralittoral rock Moderate energy infralittoral rock Low energy infralittoral rock High energy circalittoral rock Low energy circalittoral rock Subtidal coarse sediment Subtidal sand Subtidal mud Subtidal mixed sediments Subtidal biogenic reefs	Blue Mussel beds (including intertidal beds on mixed and sandy sediments) Seagrass beds Estuarine rocky habitats Honeycomb worm (*Sabellaria alveolata*) reefs Intertidal sediments dominated by aquatic angiosperms Subtidal macrophyte-dominated sediment
Sidmouth to West Bay	SAC		
Studland to Portland	SAC	High energy infralittoral rock Moderate energy infralittoral rock Low energy infralittoral rock High energy circalittoral rock Moderate energy circalittoral rock Subtidal biogenic reefs	Blue Mussel beds (including intertidal beds on mixed and sandy sediments) Fragile sponge and anthozoan communities on subtidal rocky habitats
Wight-Barfleur Reef [1]	SAC	High energy circalittoral rock Moderate energy circalittoral rock Subtidal coarse sediment Subtidal mixed sediments	Fragile sponge and anthozoan communities on subtidal rocky habitats
Poole Harbour	SPA	intertidal sand and muddy sand Intertidal mud Intertidal coarse sediment Intertidal mixed sediments Coastal saltmarshes and saline reedbeds Intertidal sediments dominated by aquatic angiosperms	Seagrass beds
Tamar Estuaries Complex	SPA	Coastal saltmarshes and saline reedbeds Intertidal mud Intertidal mixed sediments	
Berrow Dunes	SSSI	Coastal saltmarshes and saline reedbeds	Coastal saltmarsh
Bridgwater Bay	SSSI	Coastal saltmarshes and saline reedbeds	Coastal saltmarsh
Chesil Beach & The Fleet	SSSI	Coastal saltmarshes and saline reedbeds Low energy infralittoral rock	Coastal saltmarsh Saline lagoons *Nematostella vectensis*
Christchurch Harbour	SSSI	Coastal saltmarshes and saline reedbeds Subtidal sand Subtidal mud	Coastal saltmarsh Saline lagoons
Dawlish Warren	SSSI	Intertidal mud Coastal saltmarshes and saline	Coastal saltmarsh Intertidal mudflats

		reedbeds	
Erme Estuary	SSSI	Intertidal sand and muddy sand Intertidal mud Coastal saltmarshes and saline reedbeds	Coastal saltmarsh Intertidal mudflats
Exe Estuary	SSSI	Intertidal mud Coastal saltmarshes and saline reedbeds Subtidal mud	Coastal saltmarsh Intertidal mudflats Saline lagoons
Hayle Estuary & Carrack Gladden	SSSI	Intertidal sand and muddy sand Intertidal mud Coastal saltmarshes and saline reedbeds	Coastal saltmarsh Intertidal mudflats
Lower Fal & Helford Intertidal	SSSI	High energy intertidal rock Moderate energy intertidal rock Low energy intertidal rock Intertidal sand and muddy sand Intertidal mud Intertidal mixed sediments	Intertidal underboulder communities Sheltered muddy gravels Intertidal mudflats Estuarine rocky habitats
Malpas Estuary	SSSI	Low energy intertidal rock Intertidal sand and muddy sand Intertidal mud Intertidal mixed sediments Coastal saltmarshes and saline reedbeds	Coastal saltmarsh Intertidal mudflats Estuarine rocky habitats
Otter Estuary	SSSI	Coastal saltmarshes and saline reedbeds	Coastal saltmarsh
Plymouth Sound Shores & Cliffs	SSSI	High energy intertidal rock Moderate energy intertidal rock Intertidal mixed sediments	Intertidal underboulder communities Estuarine rocky habitats
Pool of Bryher & Popplestone Bank (Bryher)	SSSI	Low energy infralittoral rock	Saline lagoons
Poole Harbour	SSSI	Low energy intertidal rock Intertidal coarse sediment Intertidal mud Coastal saltmarshes and saline reedbeds Intertidal sediments dominated by aquatic angiosperms Low energy infralittoral rock	Coastal saltmarsh Intertidal mudflats Saline lagoons Estuarine rocky habitats *Nematostella vectensis*
Porlock Ridge & Saltmarsh	SSSI	Coastal saltmarshes and saline reedbeds	Coastal saltmarsh
Portland Harbour Shore	SSSI	Coastal saltmarshes and saline reedbeds	Coastal saltmarsh
Rosemullion	SSSI	High energy intertidal rock Moderate energy intertidal rock	
Salcombe to Kingsbridge Estuary	SSSI	Low energy intertidal rock Intertidal mud Coastal saltmarshes and saline reedbeds Intertidal sediments dominated by aquatic angiosperms	Coastal saltmarsh Intertidal mudflats Estuarine rocky habitats
Saltern Cove	SSSI	Moderate energy intertidal rock Low energy intertidal rock	

Severn Estuary	SSSI	High energy intertidal rock Moderate energy intertidal rock Low energy intertidal rock Intertidal coarse sediment Intertidal mud Intertidal mixed sediments Coastal saltmarshes and saline reedbeds Intertidal sediments dominated by aquatic angiosperms Intertidal biogenic reefs	Intertidal underboulder communities Sheltered muddy gravels Coastal saltmarsh Intertidal mudflats Estuarine rocky habitats
St Martin's Sedimentary Shore	SSSI	Intertidal sand and muddy sand Intertidal mud	Intertidal mudflats
Swanpool	SSSI		*Victorella pavida*
Tamar-Tavy Estuary	SSSI	Coastal saltmarshes and saline reedbeds	Coastal saltmarsh
Taw-Torridge Estuaries	SSSI	Intertidal mud Coastal saltmarshes and saline reedbeds	Coastal saltmarsh Intertidal mudflats
Upper Fal Estuary & Woods	SSSI	Intertidal mud Coastal saltmarshes and saline reedbeds	Coastal saltmarsh Intertidal mudflats
Wembury Point	SSSI	High energy intertidal rock Moderate energy intertidal rock Low energy intertidal rock Intertidal mixed sediments	Intertidal underboulder communities Intertidal underboulder communities
Yealm Estuary	SSSI	High energy intertidal rock Moderate energy intertidal rock Low energy intertidal rock Intertidal sand and muddy sand Intertidal mud Intertidal mixed sediments	Intertidal underboulder communities Sheltered muddy gravels Intertidal mudflats Estuarine rocky habitats

[1] Changes since progress report 3.

Appendix 12: Management measures terminology

A note on terminology in relation to the Finding Sanctuary project
[This was a briefing note prepared for stakeholder representatives in January 2011]

At Finding Sanctuary we've always considered it of key importance to clarify what activities will need restricting in MCZs, in order for our process to work effectively, and for our recommendations to be clear. We have strived hard to get as much clarity as possible, working with (amongst others) Natural England, the Joint Nature Conservation Committee, Defra, the Marine Management Organisation and other relevant authorities and organisations.

It has become increasingly evident that there is a lot of confusion around terminology. In particular, the term 'management measures' is sometimes used loosely to refer to the nature of activity restrictions, the mechanism by which restrictions are achieved, or both. Other people use the term in a much more narrowly defined way, to mean the mechanism through which management is put in place. Our own usage of the term has changed as we've realised this, and we now use the term in its narrower definition.

When it comes to management of MCZs, we now distinguish between the 'what' and the 'how':

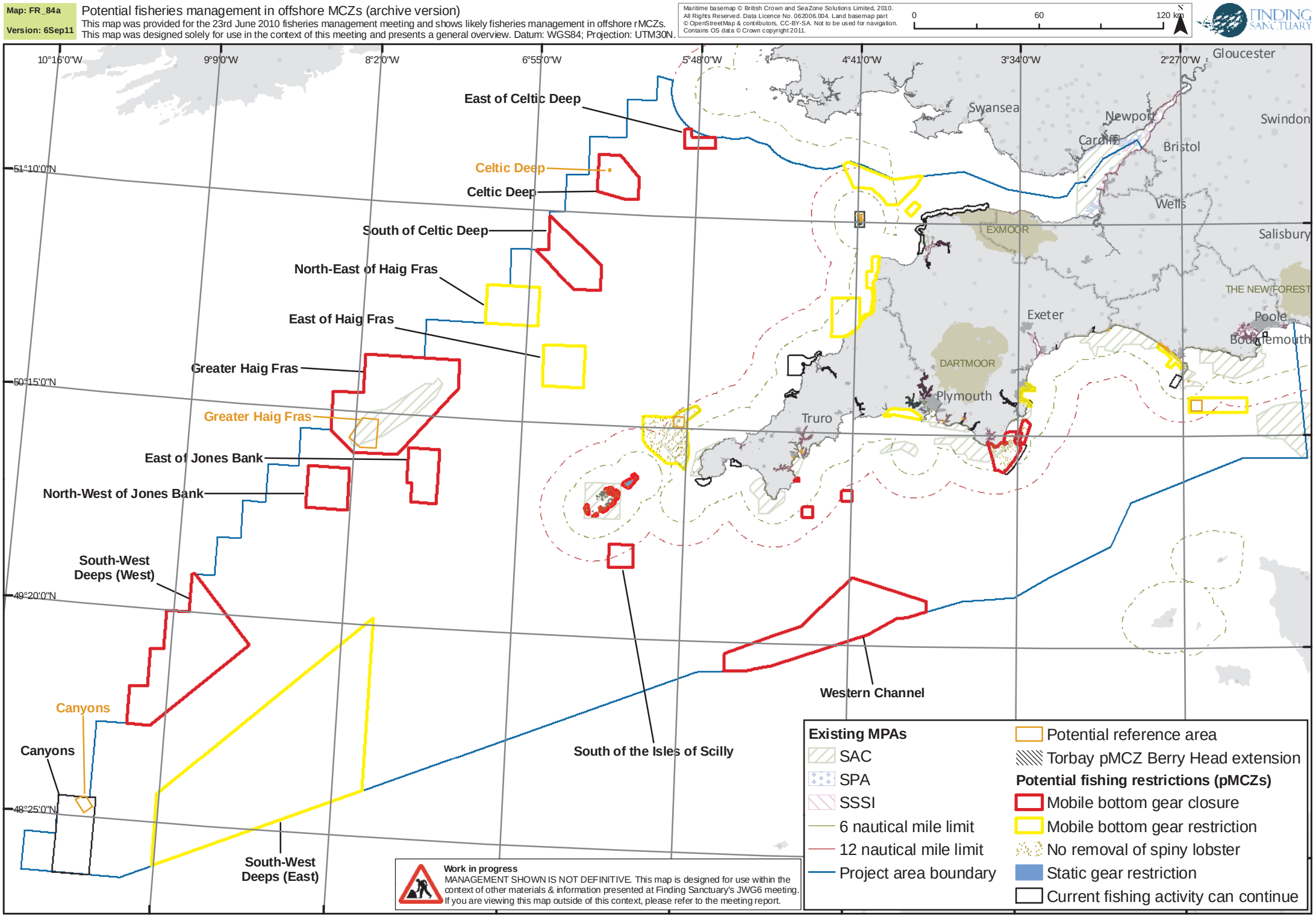
- The 'what' refers to what needs to happen on the ground in order to achieve the conservation objectives: what activities need excluding entirely from a site, what activities are allowed to happen without restrictions, and what activities are allowed as long as they are managed, restricted, or modified in a particular way.
- The 'how' refers to the mechanism through which activity restrictions are put in place. For example, that might be a byelaw, activity licensing, a voluntary agreement, or a restriction put in place through the Common Fisheries Policy.

We use the term 'management measures' to refer only to the 'how', not to the 'what'. We have now been given an extended timeline and remit, in that we've been asked to develop options for management measures within our proposed MCZs, and to do so by working together with relevant regional stakeholders. We're currently planning how to approach this new work area.
However, before the 'how' can be addressed in any meaningful way, the 'what' needs to be clear. Getting the 'what' right and properly defined has been a real priority for us throughout, and a central aspect of our stakeholder work. In the absence of official guidance, we started by developing assumptions on what management restrictions would need to be put in place. These assumptions were based on project team and stakeholder knowledge.

Late last year, the regional projects were given official guidance on the environmental pressures that the species and habitats listed in the Ecological Network Guidance are sensitive to, and some guidance on what activities cause these pressures. This gives an indication of the activities that might need restricting in MCZs, but unfortunately does not give us any clear answers. We are therefore continuing to work with assumptions as previously, although the project team will now be cross-referencing the assumptions with the official guidance to ensure there are no obvious discrepancies. We have also asked Natural England and the JNCC to provide us with a 'reality check' of our assumptions throughout the remainder of our process, so that we can be assured that they will able to support our recommendations.

Appendix 13: Management maps

The maps on the following three pages (FR_084a-c) show a visual representation of the stage the management discussions had reached at the time of the vulnerability assessments described in section I.9. These maps were produced for management and Working Group meetings in June 2011 using the best advice available at the time. The management indicated is not definitive. These maps can be considered archive versions of OWG_63, IWG_82a and IWG_82d and contain data, terminology and symbology from the time they were first produced (May and June 2011).


Map: FR_84a
Version: 6Sep11
Potential fisheries management in offshore MCZs (archive version)
This map was provided for the 23rd June 2010 fisheries management meeting and shows likely fisheries management in offshore rMCZs.
This map was designed solely for use in the context of this meeting and presents a general overview. Datum: WGS84; Projection: UTM30N.
Maritime basemap © British Crown and SeaZone Solutions Limited, 2010. All Rights Reserved. Data Licence No. 062006.004. Land basemap part © OpenStreetMap & contributors, CC-BY-SA. Not to be used for navigation. Contains OS data © Crown copyright 2011.
0
60
120 km
FINDING SANCTUARY
10°16'0"W
9°9'0"W
8°2'0"W
6°55'0"W
5°48'0"W
4°41'0"W
3°34'0"W
2°27'0"W
51°10'0"N
50°15'0"N
49°20'0"N
48°25'0"N
East of Celtic Deep
Celtic Deep
Celtic Deep
South of Celtic Deep
North-East of Haig Fras
East of Haig Fras
Greater Haig Fras
Greater Haig Fras
East of Jones Bank
North-West of Jones Bank
South-West Deeps (West)
Canyons
Canyons
South-West Deeps (East)
South of the Isles of Scilly
Western Channel
Gloucester
Swansea
Newport
Cardiff
Swindon
Bristol
Wells
EXMOOR
Salisbury
THE NEW FOREST
Exeter
Poole
Bournemouth
DARTMOOR
Plymouth
Truro
Existing MPAs
SAC
SPA
SSSI
6 nautical mile limit
12 nautical mile limit
Project area boundary
Potential reference area
Torbay pMCZ Berry Head extension
Potential fishing restrictions (pMCZs)
Mobile bottom gear closure
Mobile bottom gear restriction
No removal of spiny lobster
Static gear restriction
Current fishing activity can continue
Work in progress
MANAGEMENT SHOWN IS NOT DEFINITIVE. This map is designed for use within the context of other materials & information presented at Finding Sanctuary's JWG6 meeting. If you are viewing this map outside of this context, please refer to the meeting report.

Map: FR_084b

Version: 6Sep11

Potential fisheries management in inshore MCZs (archive version)

This map was provided for the 23rd June 2010 fisheries management meeting and shows likely fisheries management in inshore rMCZs, based on the best advice available at the time. Datum: WGS84; Projection: UTM30N.

0 35 70 km

FINDING SANCTUARY

Existing MPAs

- SAC
- SPA
- SSSI
- 6 nautical mile limit
- 12 nautical mile limit
- Project area boundary

Potential reference area

- Torbay pMCZ Berry Head extension

Potential fishing restrictions (pMCZs)

- Mobile bottom gear closure
- Mobile bottom gear restriction
- No removal of spiny lobster
- Static gear restriction
- Current fishing activity can continue

Isles of Scilly Sites

0 2 4 km

North of Lundy (Atlantic Array area)

Morte Platform

Lundy

Lundy

Bideford to Foreland Point

Taw Torridge Estuary

Broad Bench to Kimmeridge Bay

Hartland Point to Tintagel

Axe Estuary

Lyme Bay

Chesil Beach and Stennis Ledges

Poole Rocks

Padstow Bay and surrounds

Camel Estuary

Otter Estuary

The Fleet

Tamar Estuary sites

Dart Estuary

Mouth of the Yealm

Newquay and The Gannel

Upper Fowey and Pont Pill

Studland Bay

Cape Bank

Cape Bank

Torbay

Devon Avon

South of Portland

The Fal

South Dorset

South-East of Portland Bill

South Dorset

Swanpool

Whitsand and Looe Bay

Skerries Bank and surrounds

The Manacles

Lands End

Mounts Bay

Erme Estuary

Erme Estuary

South-east of Falmouth

South of Falmouth

Work in progress

MANAGEMENT SHOWN IS NOT DEFINITIVE. This map is designed for use within the context of other materials & information presented at Finding Sanctuary's JWG6 meeting. If you are viewing this map outside of this context, please refer to the meeting report.

Map: FR_084c

Version: 6Sep11

Potential non-fisheries management in inshore MCZs (archive version)

This map shows likely management of activities except fisheries in inshore pMCZs - this map was based on the best advice available at the time of the 6th meeting of Finding Sanctuary's Joint Working Group in June 2011. Datum: WGS84; Projection: UTM30N.

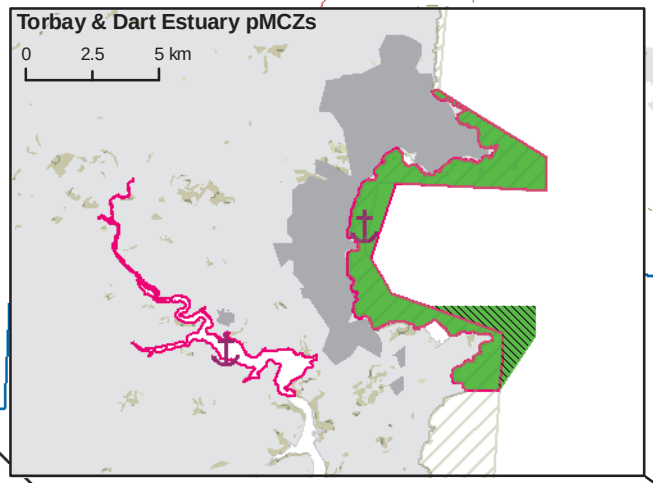
0 5 10 km

N

FINDING SANCTUARY

Torbay & Dart Estuary pMCZs

0 2.5 5 km



Existing MPAs

- SAC
- SPA
- SSSI
- 6 nautical mile limit
- 12 nautical mile limit
- Project area boundary
- Potential reference area
- Torbay pMCZ Berry Head extension
- Skerries pMCZ boundary correction

Potential management of activities other than commercial fishing

- bait digging restriction
- anchoring restriction/ installation of eco-moorings
- Zoning / codes of conduct for recreational activities
- Aquaculture management
- Current (non-commercial fishing) activities can continue

North of Lundy (Atlantic Array area)

Morte Platform

Lundy

Lundy

Bideford to Foreland Point

Broad Bench to Kimmeridge Bay

Taw Torridge Estuary

Hartland Point to Tintagel

Axe Estuary

Lyme Bay

Chesil Beach and Stennis Ledges

Poole Rocks

Otter Estuary

The Fleet

Padstow Bay and surrounds

Camel Estuary

Tamar Estuary sites

Dart Estuary

Mouth of the Yealm

Newquay and The Gannel

Upper Fowey and Pont Pill

Cape Bank

Cape Bank

Devon Avon

Torbay

South of Portland

Studland Bay

The Fal

South Dorset

South Dorset

Isles of Scilly Sites

Swanpool

South-East of Portland Bill

Whitsand and Looe Bay

Skerries Bank and surrounds

The Manacles

Lands End

Mounts Bay

Erme Estuary

Erme Estuary

South-east of Falmouth

South of Falmouth

6°39'30"W 6°9'0"W 5°38'30"W 5°8'0"W 4°37'30"W 4°7'0"W 3°36'30"W

51°49'30"N 51°19'0"N 50°48'30"N 50°18'0"N 49°47'30"N

Work in progress

MANAGEMENT SHOWN IS NOT DEFINITIVE. This map is designed for use within the context of other materials & information presented at Finding Sanctuary's JWG6 meeting. If you are viewing this map outside of this context, please refer to the meeting report.

Appendix 14: Overview of all materials supplied with this report

Throughout this report, there are references to additional documents and materials. These will be available to download via a link on the project website over the days and weeks following the submission of the report. The materials available are listed here.

Summary documents

Summary of final recommendations

This is a document that summarises the recommendations in this report, giving a network overview but no site-specific details.

Final recommendations summary leaflet

This is a very brief summary of the final recommendations, aimed at the wider public.

Maps, GIS data and ecological information

iPDF Maps

These are PDF files with map layers that can be turned on and off individually. The following are provided:

- Offshore scale maps (covering the whole region), and county-scale maps, in three sets:
    - Fisheries (showing spatial information on the distribution of fishing effort, from FisherMap and VMS data)
    - Socio-economic (other than fisheries)
    - Biophysical (ecological datasets including FOCI and broad-scale habitat data layers)

Network progression animation

Animated PowerPoint presentation showing the evolution of the network configuration over the planning iterations. For details, refer to the meeting reports and progress reports.

Table of major network alterations

A table summarising some of the key modification to the developing network configuration over the course of the planning period. This should always be viewed in the context of the network progression animation, and the information in meeting reports and progress reports.

Shapefile of network configuration (site boundaries) with metadata

This allows GIS users to map the network and carry out data analysis using rMCZ and recommended reference area boundaries.

All maps from final report as separate image files

IWG, OWG and JWG maps

These are the A2-sized maps prepared for stakeholder meetings over the course of the project.

June 2010 version of the regional profile

This contains the maps and notes that were provided to stakeholders earlier in the process, much of the information has been superseded since then.

Ecological information supplied by stakeholders

- Estuaries information supplied by the Environment Agency
- Isles of Scilly Local Group materials
- North Devon Biosphere Marine Reserve Working Group materials

Site statistics tables and site lists

Excel site statistics tables*:*
A spreadsheet containing all the site statistics from the site reports.

Full site list excel document
Spreadsheet containing a full site list, and the conservation objective summary tables.

Co-ordinates spreadsheet

A spreadsheet of site centroid and boundary co-ordinates in three formats: Degrees Minutes Seconds, Decimal Degrees, and Degrees Minutes Decimal Seconds. This spreadsheet has been provided with UKHO chart users in mind, as they will require Degrees Minutes Decimal Seconds in order to plot coordinates accurately, and this format is not used anywhere in the report.

All project reports

- IWG, OWG, JWG meeting reports
- LG meeting reports
- SG meeting reports
- Process Group meeting reports
- Progress reports and draft final recommendations report
- SAP feedback documents, and Finding Sanctuary's SAP feedback reaction document following the first iteration

Vulnerability Assessments Audit Trail

Audit trail excel sheets of VA meetings

FS process documents

Protocol from final project phase

Finding Sanctuary report on California MLPA

Appendix 15: Full text of draft conservation objectives

Introduction to Appendix 15

This appendix contains the full text for each draft conservation objective listed in one or more sites. The full text of the draft conservation objectives is not included in the site reports, in order to avoid repeating the same text multiple times in where a given draft objective is listed for more than one site. Grouping the objectives in this appendix, and including each one just once rather than multiple times, has saved approximately 400 pages of what is already a very long report.

The first sentence of each conservation objective makes a brief statement about the importance of the feature that the objective is written for. In many instances, this simply states that protecting the feature is necessary in order to meet the ENG. A full detailed rationale and justification for why these features need protecting in order to achieve an ecologically coherent network is included in the ENG document, so it is not repeated here (where relevant, that includes details on which legislation or conservation lists a given feature is listed on).

The table below shows which objectives occur in which sites (please also refer to section II.2.6, which contains a table of all the sites in the recommendations with a summary list of draft conservation objectives in each one).

Broad Scale Habitats		
High energy intertidal rock	Maintain in favourable condition	Chesil Beach and Stennis Ledges, Skerries Bank and surrounds, Erme Estuary, Whitsand to Looe Bay, Mounts Bay, Land's End, Newquay and the Gannel, Padstow Bay and Surrounds, Hartland point to tintagel, Bideford to foreland point, Men a Vaur to White Island, Tean, Hanague to Deep Ledge, Plympton to Spanish Ledge, Smith Sound Tide Swept Channel, Gilstone to Gorregan
High energy intertidal rock	recover to reference condition	Mouth of the Yealm
Moderate energy intertidal rock	Maintain in favourable condition	Broad Bench to Kimmeridge Bay, Torbay, Skerries Bank and surrounds, Devon Avon Estuary, Erme Estuary, Whitsand and Looe Bay, The Manacles, Mounts Bay,Newquay and the Gannel, Padstow Bay and surrounds, Hartland Point to Tintagel, Bideford to Foreland Point, Men a Vaur to White Island, Tean, Tean Non-disturbance area, Hanjague to Deep Ledge, Higher Town, Lower Ridge to Innisvouls, Peninnis to Dry Ledge, Plympton to Spanish Ledge, Smith Sound Tide Swept Channel, Smith Sound non-disturbance area, Gilstone to Gorregan

Moderate energy intertidal rock	recover to reference condition	Mouth of the Yealm
Low energy intertidal rock	Maintain in favourable condition	Torbay, Dart Estuary, Erme Estuary, Whitsand and Looe Bay, Upper Fowey and Pont Pill, Newquay and the Gannel, Camel Estuary, Bideford to Foreland Point, Taw Torridge Estuaries, Higher Town, Peninnis to Dry Ledge
Low energy intertidal rock	recover to reference condition	The Fal
Intertidal coarse sediment	Maintain in favourable condition	Broad Bench to Kimmeridge Bay, Chesil Beach and Stennis Ledges, Axe Estuary, Otter Estuary, Torbay, Skerries Bank and surrounds, Devon Avon Estuary, Erme Estuary, Tamar estuary sites, Whitsand and Looe Bay, Upper Fowey and Pont Pill, The Manacles, Mounts Bay, Land's End, Newquay and the Gannel, Padstow Bay and surrounds, Camel Estuary, Hartland Point to Tintagel, Bideford to Foreland Point, Taw Torridge Estuaries, Men a Vaur to White Island, Tean, Tean Non-disturbance area, Hanjague to Deep Ledge, Higher Town, Peninnis to Dry Ledge
Intertidal coarse sediments	recover to reference condition	The Fleet, Lyme Bay, Mouth of the Yealm, The Fal
Intertidal sand and muddy sand	Maintain in favourable condition	Studland Bay, Torbay, Skerries Bank and surrounds, Devon Avon Estuary, Whitsand and Looe Bay, Upper Fowey and Pont Pill, The Manacles, Mounts Bay, Land's End, Newquay and the Gannel, Padstow Bay and surrounds, Hartland Point to Tintagel, Bideford to Foreland Point, Taw Torridge Estuaries, Men a Vaur to White Island, Tean, Peninnis to Dry Ledge, Plympton to Spanish Ledge
Intertidal mud	Maintain in favourable condition	Studland Bay, Axe Estuary, Otter Estuary, Torbay, Dart Estuary, Skerries Bank and surrounds, Devon Avon Estuary, Upper Fowey and Pont Pill, The Manacles, Land's End, Newquay and the Gannel, Padstow Bay and surrounds, Hartland Point to Tintagel, Bideford to Foreland Point, Men a Vaur to White Island, Tean, Higher Town, Peninnis to Dry Ledge
Intertidal mud	recover to reference condition	The Fleet, Erme Estuary
Intertidal mixed sediment	Maintain in favourable condition	Hartland Point to Tintagel, Axe Estuary, Torbay, Skerries Bank and surrounds, Erme Estuary, Whitsand and Looe Bay, The Manacles, Mounts Bay, Bideford to Foreland Point, Peninnis to Dry Ledge
Intertidal mixed sediments	recover to reference condition	Erme Estuary
Coastal saltmarshes and saline reedbeds	Maintain in favourable condition	Dart Estuary, Devon Avon Estuary, otter estuary, Axe Estuary, Upper Fowey and Pont Pill, Newquay and the Gannel, Camel Estuary, Hartland Point to Tintagel, Taw Torridge Estuaries
Coastal saltmarshes and saline reedbeds	recover to reference condition	Erme Estuary, The Fleet
Intertidal sediments dominated by aquatic angiosperms	recover to reference condition	The Fleet
Intertidal biogenic reefs	Maintain in favourable condition	Tamar estuary sites

High energy infralittoral rock	Maintain in favourable condition	Otter Estuary, Skerries Bank and surrounds, Devon Avon Estuary, Erme Estuary, Whitsand and Looe Bay, Mounts Bay, Land's End, Padstow Bay and surrounds, Hartland Point to Tintagel, Bideford to Foreland Point, Men a Vaur to White Island, Tean, Hanague to Deep Ledge, Higher Town, Lower Ridge to Innisvouls, Peninnis to Dry Ledge, Plympton to Spanish Ledge, Smith Sound Tide Swept Channel, Smith Sound non-disturbance area, Gilstone to Gorregan, Bishop to Crim
High energy infralittoral rock	Recover to favourable condition	Chesil Beach and Stennis Ledges, Bristows to the Stones
High energy infralittoral rock	recover to reference condition	Lyme Bay, Cape Bank
Moderate energy infralittoral rock	Maintain in favourable condition	Skerries Bank and surrounds, Erme Estuary, The Manacles, Land's End, Padstow Bay and surrounds, Bideford to Foreland Point, Men a Vaur to White Island, Tean, Tean Non-disturbance area, Hanague to Deep Ledge, Higher Town, Lower Ridge to Innisvouls, Peninnis to Dry Ledge, Plympton to Spanish Ledge, Smith Sound Tide Swept Channel, Smith Sound non-disturbance area, Gilstone to Gorregan, Bishop to Crim
Moderate energy infralittoral rock	Recover to favourable condition	Bristows to the Stones
Moderate energy infralittoral rock	recover to reference condition	Cape Bank, Lundy
Low energy infralittoral rock	Maintain in favourable condition	Hanjague to Deep Ledge
Low energy infralittoral rock	recover to reference condition	Erme Estuary
High energy circalittoral rock	Maintain in favourable condition	South of Portland, Land's End, Padstow Bay and surrounds, Morte Platform, Men a Vaur to White Island, Hanjague to Deep Ledge, Lower Ridge to Innisvouls, Peninnis to Dry Ledge, Plympton to Spanish Ledge, Gilstone to Gorregan, Bishop to Crim
High energy circalittoral rock	Recover to favourable condition	South Dorset, Bideford to Foreland Point, Bristows to the Stones
High energy circalittoral rock	recover to reference condition	South Dorset, South-East of Portland Bill, Cape Bank
Moderate energy circalittoral rock	Maintain in favourable condition	Poole Rocks, South of Portland, Skerries Bank and surrounds, Whitsand and Looe Bay, The Manacles, Land's End, Padstow Bay and surrounds, North of Lundy (Atlantic Array Area), Morte Platform, Men a Vaur to White Island, Hanague to Deep Ledge, Lower Ridge to Innisvouls, Peninnis to Dry Ledge, Plympton to Spanish Ledge, Smith Sound Tide Swept Channel, Gilstone to Gorregan, Bishop to Crim
Moderate energy circalittoral rock	Recover to favourable condition	South Dorset, South of Falmouth, Cape Bank, Bristows to the Stones, Greater Haig Fras, East of Jones Bank, East of Haig Fras, Western Channel
Moderate energy circalittoral rock	recover to reference condition	Greater Haig Fras, South Dorset, Cape Bank, Lundy
Low energy circalittoral rock	Maintain in favourable condition	Hanjague to Deep Ledge

Subtidal coarse sediment	Maintain in favourable condition	South Dorset, South of Portland, Skerries Bank and surrounds, Whitsand and Looe Bay, The Manacles, Land's End, Newquay and the Gannel, Padstow Bay and surrounds, Hartland Point to Tintagel, North of Lundy (Atlantic Array Area), Morte Platform, Bideford to Foreland Point, Bristows to the Stones, Peninnis to Dry Ledge, Gilstone to Gorregan, Bishop to Crim
Subtidal coarse sediment	Recover to favourable condition	Chesil Beach and Stennis Ledges, South-East of Falmouth, South of Falmouth, Cape Bank, Canyons, South-West Deeps (West), South-West Deeps (East), North-West of Jones Bank, Greater Haig Fras, East of Haig Fras, North East of Haig Fras, South of Celtic Deep, East of Celtic Deep, Western Channel, South of the Isles of Scilly
Subtidal coarse sediment	recover to reference condition	Greater Haig Fras, The Fleet, The Fal, Cape Bank, Lundy
Subtidal sand	Maintain in favourable condition	Poole Rocks, Studland Bay, South of Portland, Otter Estuary, Skerries Bank and surrounds, Devon Avon Estuary, Erme Estuary, Whitsand and Looe Bay, The Manacles, Mounts Bay, Land's End, Newquay and the Gannel, Hartland Point to Tintagel, North of Lundy (Atlantic Array Area), Bideford to Foreland Point, Taw Torridge Estuaries,Men a Vaur to White Island, Tean, Hanague to Deep Ledge, Higher Town, Lower Ridge to Innisvouls, Peninnis to Dry Ledge, Plympton to Spanish Ledge, Smith Sound Tide Swept Channel, South-West Deeps (East)
Subtidal sand	Recover to favourable condition	Chesil Beach and Stennis Ledges, South-East of Falmouth, Canyons, South-West Deeps (West), North-West of Jones Bank, Greater Haig Fras, East of Jones Bank, East of Haig Fras, North East of Haig Fras, South of Celtic Deep, East of Celtic Deep , South of the Isles of Scilly
Subtidal sand	recover to reference condition	Greater Haig Fras, The Fal, Lundy
Subtidal mud	Maintain in favourable condition	Dart Estuary, Skerries Bank and surrounds, Devon Avon Estuary, Erme Estuary, Newquay and the Gannel, Taw and Torridge Estuaries
Subtidal mud	Recover to favourable condition	Torbay, North-West of Jones Bank, Greater Haig Fras, East of Jones Bank, North East of Haig Fras, South of Celtic Deep, Celtic Deep, East of Celtic Deep
Subtidal mud	recover to reference condition	Greater Haig Fras, Celtic Deep, Erme Estuary
Subtidal mixed sediments	Maintain in favourable condition	Poole Rocks, Studland Bay, South Dorset, South of Portland, Axe Estuary, The Manacles, Mounts Bay, North of Lundy (Atlantic Array Area), Bristows to the Stones, Tean, Tean non-disturbance area, Hanague to Deep Ledge, Higher Town, Lower Ridge to Innisvouls, Peninnis to Dry Ledge
Subtidal mixed sediments	Recover to favourable condition	South-West Deeps (West), Greater Haig Fras, North East of Haig Fras, South of Celtic Deep, Western Channel
Subtidal mixed sediments	recover to reference condition	Greater Haig Fras, South Dorset, Lyme Bay
Subtidal macrophyte-dominated sediment	Maintain in favourable condition	The Manacles, Tean, Tean non-disturbance area, Higher Town, Lower Ridge to Innisvouls
Subtidal macrophyte-dominated sediment	recover to reference condition	The Fal
Deep-sea bed	Recover to favourable condition	The Canyons, South-West Deeps (East)
Deep-sea bed	recover to reference condition	The Canyons
Habitat FOCI		

Blue Mussel beds (including intertidal beds on mixed and sandy sediments)	Maintain in favourable condition	Tamar estuary sites
Blue Mussel beds	recover to reference condition	South-East of Portland Bill
Cold-water coral reefs	Recover to favourable condition	The Canyons
Cold water coral reefs	recover to reference condition	The Canyons
Estuarine rocky habitats	Maintain in favourable condition	Dart Estuary, Erme Estuary, Upper Fowey and Pont Pill, Camel Estuary
Estuarine rocky habitats	recover to reference condition	Mouth of the Yealm
Fragile sponge & anthozoan communities on subtidal rocky habitats	Maintain in favourable condition	Hartland Point to Tintagel, Men a Vaur to White Island, Tean, Tean non-disturbance area, Hanjague to Deep Ledge, Lower Ridge to Innisvouls, Peninnis to Dry Ledge, Plympton to Spanish Ledge, Gilstone to Gorregan, Bishop to Crim
Fragile sponge & anthozoan communities on subtidal rocky habitats	Recover to favourable condition	Bristows to the Stones
Fragile sponge & anthozoan communities on subtidal rocky habitats	recover to reference condition	Lundy
Intertidal under boulder communities	Maintain in favourable condition	Torbay, Dart Estuary, Skerries Bank and surrounds, Men a Vaur to White Island, Tean, Tean Non-disturbance area, Hanague to Deep Ledge, Higher Town, Peninnis to Dry Ledge, Plympton to Spanish Ledge
Maërl beds	Maintain in favourable condition	The Manacles
Maërl Beds	recover to reference condition	The Fal
Mud habitats in deep water	Maintain in favourable condition	Lundy
Mud habitats in deep water	Recover to favourable condition	Celtic Deep
Mud Habitats in Deep Water	recover to reference condition	Celtic Deep, Lundy
Peat & clay exposures	Maintain in favourable condition	Higher Town
Sabellaria alveolata reefs	Maintain in favourable condition	Torbay, Hartland Point to Tintagel, Bideford to Foreland Point
Sabellaria alveolata reefs	recover to reference condition	Lyme Bay
Seagrass beds	Maintain in favourable condition	Whitsand and Looe Bay, Mounts Bay, Men a Vaur to White Island, Tean, Tean Non-disturbance area, Higher Town, Lower Ridge to Innisvouls
Seagrass beds	Recover to favourable condition	Studland Bay, Torbay
Seagrass Beds	recover to reference condition	The Fleet, The Fal, Mouth of the Yealm

Sheltered muddy gravels	Maintain in favourable condition	Erme Estuary, Upper Fowey and Pont Pill
Sheltered muddy gravels	recover to reference condition	Erme Estuary
Subtidal chalk	Recover to favourable condition	South Dorset
Subtidal chalk	recover to reference condition	South Dorset
Tide-swept channels	Maintain in favourable condition	Men a Vaur to White Island, Tean, Tean non-disturbance area, Higher Town, Lower Ridge to Innisvouls, Smith Sound Tide Swept Channel, Smith Sound non-disturbance area, Gilstone to Gorregan
Low or limited mobility FOCI species		
Padina pavonica	Maintain in favourable condition	Broad Bench to Kimmeridge Bay, Torbay, Hartland Point to Tintagel,
Padina pavonica	recover to reference condition	Lyme Bay
Cruoria cruoriaeformis	Maintain in favourable condition	Smith Sound Tide Swept Channel
Cruoria cruoriaeformis	recover to reference condition	The Fal
Grateloupia montagnei	recover to reference condition	The Fal
Lithothamnion corallioides	recover to reference condition	The Fal
Phymatolithon calcareum	recover to reference condition	The Fal, Lundy
Alkmaria romijni	Maintain in favourable condition	Dart Estuary, Devon Avon Estuary
Gobius cobitis	Maintain in favourable condition	Whitsand and Looe Bay, Mounts Bay, Newquay and the gannel, Peninnis to Dry Ledge, Smith Sound Tide Swept Channel, Gilstone to Gorregan, Poole Rocks
Gobius couchi	recover to reference condition	The Fal
Hippocampus guttulatus	Maintain in favourable condition	Torbay, Whitsand and Looe Bay
Hippocampus hippocampus	Maintain in favourable condition	Skerries Bank and surrounds
Hippocampus hippocampus	Recover to favourable condition	Studland Bay
Victorella pavida	recover to reference condition	Swanpool
Amphianthus dohrnii	Maintain in favourable condition	Lower Ridge to Innisvouls, Whitsand and Looe Bay, The Manacles, Men a Vaur to White Island, Hanjague to Deep Ledge, Peninnis to Dry Ledge, Plympton to Spanish Ledge, Smith Sound Tide Swept Channel, Smith Sound non-disturbance area, Smith Sound non-disturbance area, Gilstone to Gorregan
Amphianthus dohrnii	recover to reference condition	Lundy
Eunicella verrucosa	Maintain in favourable condition	Skerries Bank and surrounds, Whitsand and Looe Bay, The Manacles, Land's End, Newquay and the Gannel, Padstow Bay and surrounds, Bideford to Foreland Point, Men a Vaur to White Island, Hanjague to Deep Ledge, Lower Ridge to Innisvouls, Peninnis to Dry Ledge, Plympton to Spanish Ledge, Smith Sound Tide Swept Channel, Smith Sound non-disturbance area, Gilstone to Gorregan, Bishop to Crim
Eunicella verrucosa	Recover to favourable condition	Chesil Beach and Stennis Ledges, Bristows to the Stones

Eunicella verrucosa	recover to reference condition	Lundy, Cape Bank
Haliclystus auricula	Maintain in favourable condition	Whitsand and Looe Bay, The Manacles, Mounts Bay, Padstow Bay and Surrounds, Men a Vaur to White Island, Higher Town, Peninnis to Dry Ledge, Gilstone to Gorregan,
Haliclystus auricula	recover to reference condition	Lyme Bay
Leptopsammia pruvoti	Maintain in favourable condition	The Manacles, Hanague to Deep Ledge, Lower Ridge to Innisvouls, Peninnis to Dry Ledge, Plympton to Spanish Ledge
Leptopsammia pruvoti	recover to reference condition	Lundy
Lucernariopsis campanulata	Maintain in favourable condition	Mounts Bay, Men a Vaur to White Island, Higher Town, Peninnis to Dry Ledge,
Lucernariopsis cruxmelitensis	Maintain in favourable condition	Mounts Bay, Smith Sound Tide Swept Channel
Lucernariopsis cruxmelitensis	Recover to favourable condition	Padstow Bay and surrounds
Palinurus elephas	Maintain in favourable condition	Padstow Bay and surrounds
Palinurus elephas	Recover to favourable condition	Skerries Bank and surrounds, The Manacles, Cape Bank, Lundy, Bristows to the Stones, Men a Vaur to White Island, Hanjague to Deep Ledge, Lower Ridge to Innisvouls, Peninnis to Dry Ledge, Plympton to Spanish Ledge, Smith Sound Tide Swept Channel, Smith Sound non-disturbance area, Gilstone to Gorregan, Bishop to Crim
Palinurus elephas	recover to reference condition	Lundy, Cape Bank
Arctica islandica	Maintain in favourable condition	Whitsand and Looe Bay, Mounts Bay, Padstow Bay and surrounds, Peninnis to Dry Ledge
Ostrea edulis	Maintain in favourable condition	Poole Rocks, Studland Bay, Torbay, Tamar estuary sites, Newquay and the Gannel
Ostrea edulis	Recover to favourable condition	Chesil Beach and Stennis Ledges
Ostrea edulis	recover to reference condition	The Fal
Paludinella littorina	Maintain in favourable condition	Broad Bench to Kimmeridge Bay, Torbay, Land's End, Newquay and the Gannel, Bideford to Foreland Point, Peninnis to Dry Ledge, Gilstone to Gorregan
Tenellia adspersa	recover to reference condition	The Fleet
Geological and geomorphological features of importance		
Celtic sea relict sandbanks	Maintain in favourable condition	South-West Deeps (West), South-West Deeps (East)
Haig Fras rock complex	Maintain in favourable condition	Greater Haig Fras
Portland Deep	Maintain in favourable condition	South of Portland
Draft conservation objectives for mobile FOCI		
Anguilla Anguilla	Maintain/Recover in or to favourable condition	Axe estuary, Otter estuary, Dart estuary, Devon Avon estuary, Erme estuary, Upper Fowey and Pont Pill, Newquay and the Gannel, Taw Torridge estuaries
Osmerus eperlanus	Maintain/Recover in or to favourable condition	Tamar estuary sites
Raja undulata	Recover to favourable condition	Studland Bay
Draft conservation objectives for non-ENG listed mobile species		
Gavia arctica	Maintain in favourable condition	Torbay
Gavia immer	Maintain in favourable condition	Torbay
Podiceps cristatus	Maintain in favourable condition	Torbay
Podiceps nigricollis	Maintain in favourable condition	Torbay

Podiceps grisegena	Maintain in favourable condition	Torbay
Podiceps auritus	Maintain in favourable condition	Torbay
Uria aalge	Maintain in favourable condition	Torbay, Lundy, Bideford to Foreland Point
Phocoena phocoena	Maintain in favourable condition	Torbay, The Manacles, Land's End, Bideford to Foreland Point
Cetorhinus maximus	Maintain in favourable condition	The Manacles, Land's End
Tursiops truncates	Maintain in favourable condition	Land's End, Padstow Bay and Surrounds
Fulmarus glacialis	Maintain in favourable condition	Padstow Bay and Surrounds
Fratercula arctica	Maintain in favourable condition	Padstow Bay and Surrounds, Lundy
Alca torda	Maintain in favourable condition	Padstow Bay and Surrounds, Lundy, Bideford to Foreland Point
Rissa tridactyla	Maintain in favourable condition	Padstow Bay and Surrounds
Puffinus puffinus	Maintain in favourable condition	Lundy
Halichoerus grypus	Maintain in favourable condition	Bideford to Foreland Point

Draft conservation objectives for broad-scale habitats

High energy intertidal rock: Maintain in favourable condition

High energy intertidal rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the High energy intertidal rock in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of high energy intertidal rock in the biogeographic region are maintained such that the feature makes its contribution to the network.

High energy intertidal rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical change (to another seabed type)	M-H	L
Physical removal (extraction of substratum)	M-H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-H	L
Salinity changes - local	NS-H	L
Temperature changes - local	NS-H	L
Water clarity changes	NS-H	L
Atmospheric climate change	M	L
Removal of target species (lethal)	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Emergence regime changes - local	NS-M	L
Introduction of microbial pathogens (disease)	NS-M	L
Siltation rate changes (high)	L	L
Siltation rate changes (low)	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

High energy intertidal rock: Recover to reference condition

High energy intertidal rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the High energy intertidal rock to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of High energy intertidal rock in the biogeographic region are recovered such that the feature makes its contribution to the network.

High energy intertidal rock is sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical change (to another seabed type)	M-H	L
Physical removal (extraction of substratum)	M-H	L
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-H	L
Salinity changes - local	NS-H	L
Temperature changes - local	NS-H	L
Water clarity changes	NS-H	L
Atmospheric climate change	M	L
Removal of target species (lethal)	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Emergence regime changes - local	NS-M	L
Introduction of microbial pathogens (disease)	NS-M	L
Siltation rate changes (high)	L	L
Siltation rate changes (low)	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Moderate energy intertidal rock: Maintain in favourable condition

Moderate energy intertidal rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Moderate energy intertidal rock in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of moderate energy intertidal rock in the biogeographic region are maintained such that the feature makes its contribution to the network.

Moderate energy intertidal rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical change (to another seabed type)	M-H	L
Physical removal (extraction of substratum)	M-H	L
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Siltation rate changes (high)	L-H	L
Atmospheric climate change	M	L
Removal of target species (lethal)	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Emergence regime changes - local	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	L-M	L
Introduction of microbial pathogens (disease)	NS-M	L
Water flow (tidal & ocean current) changes - regional/national	NS-M	L
Water flow (tidal current) changes - local	NS-M	L
Wave exposure changes - local	NS-M	L
Wave exposure changes - regional/national	NS-M	L
Temperature changes - local	L	L
Salinity changes - local	NS-L	L
Siltation rate changes (low)	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Moderate energy intertidal rock: Recover to reference condition

Moderate energy intertidal rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Moderate energy intertidal rock to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of moderate energy intertidal rock in the biogeographic region are recovered such that the feature makes its contribution to the network.

Moderate energy intertidal rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical change (to another seabed type)	M-H	L
Physical removal (extraction of substratum)	M-H	L
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Siltation rate changes (high)	L-H	L
Atmospheric climate change	M	L
Removal of target species (lethal)	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Emergence regime changes - local	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	L-M	L
Introduction of microbial pathogens (disease)	NS-M	L
Water flow (tidal & ocean current) changes - regional/national	NS-M	L
Water flow (tidal current) changes - local	NS-M	L
Wave exposure changes - local	NS-M	L
Wave exposure changes - regional/national	NS-M	L
Temperature changes - local	L	L
Salinity changes - local	NS-L	L
Siltation rate changes (low)	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Low energy intertidal rock: Maintain in favourable condition

Low energy intertidal rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Low energy intertidal rock in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of low energy intertidal rock in the biogeographic region are maintained such that the feature makes its contribution to the network.

Low energy intertidal rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	M-H	L
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	M-H	L
Siltation rate changes (high)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Surface abrasion: damage to seabed surface features	M-H	L
Temperature changes - local	L-H	L
Organic enrichment	NS-H	L
Siltation rate changes (low)	NS-H	L
Water flow (tidal & ocean current) changes - regional/national	NS-H	L
Water flow (tidal current) changes - local	NS-H	L
Wave exposure changes - local	NS-H	L
Wave exposure changes - regional/national	NS-H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Removal of target species (lethal)	M	L
Temperature changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	L-M	L
Introduction of microbial pathogens (disease)	NS-M	L
Salinity changes - local	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Low energy intertidal rock: Recover to reference condition

Low energy intertidal rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Low energy intertidal rock in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of low energy intertidal rock in the biogeographic region are recovered such that the feature makes its contribution to the network.

Low energy intertidal rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	M-H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M-H	L
Siltation rate changes (high)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Surface abrasion: damage to seabed surface features	M-H	L
Temperature changes - local	L-H	L
Organic enrichment	NS-H	L
Siltation rate changes (low)	NS-H	L
Water flow (tidal & ocean current) changes - regional/national	NS-H	L
Water flow (tidal current) changes - local	NS-H	L
Wave exposure changes - local	NS-H	L
Wave exposure changes - regional/national	NS-H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Removal of target species (lethal)	M	L
Temperature changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	L-M	L
Introduction of microbial pathogens (disease)	NS-M	L
Salinity changes - local	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Intertidal coarse sediment: Maintain in favourable condition

Intertidal coarse sediment is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Intertidal coarse sediment in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of intertidal coarse sediment in the biogeographic region are maintained such that the feature makes its contribution to the network.

Intertidal coarse sediment is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Temperature changes - local	L-H	L
Atmospheric climate change	M	L
Physical change (to another seabed type)	M	L
Physical removal (extraction of substratum)	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	NS-M	L
Siltation rate changes (high)	L	L
Siltation rate changes (low)	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Intertidal coarse sediments: Recover to reference condition

Intertidal coarse sediment is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Intertidal coarse sediment to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of intertidal coarse sediment in the biogeographic region are recovered such that the feature makes its contribution to the network.

Intertidal coarse sediment is sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Temperature changes - local	L-H	L
Atmospheric climate change	M	L
Physical change (to another seabed type)	M	L
Physical removal (extraction of substratum)	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	NS-M	L
Siltation rate changes (high)	L	L
Siltation rate changes (low)	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Intertidal sand and muddy sand: Maintain in favourable condition

Intertidal sand and muddy sand is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Intertidal sand and muddy sand in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of intertidal sand and muddy sand in the biogeographic region are maintained.

Intertidal sand and muddy sand is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes (sea level) - regional/national	H	L
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Physical removal (extraction of substratum)	M	L
Siltation rate changes (high)	M	L
Siltation rate changes (low)	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Temperature changes - regional/national	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L
Removal of non-target species (lethal)	NS-M	L
Removal of target species (lethal)	NS-M	L
Salinity changes - local	L	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	L	H
Surface abrasion: damage to seabed surface features	L	H
Temperature changes - local	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices*

Intertidal mud: Maintain in favourable condition

Intertidal mud is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Intertidal mud in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of intertidal mud in the biogeographic region are maintained such that the feature makes its contribution to the network.

Intertidal mud is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes (sea level) - regional/national	H	L
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	M-H	H
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Removal of non-target species (lethal)	M	M
Temperature changes - regional/national	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L-H
Removal of target species (lethal)	NS-M	L-H
Salinity changes - local	L	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	L	H
Siltation rate changes (high)	L	H
Structural abrasion/penetration: Structural damage to seabed >25mm	L	H
Temperature changes - local	L	H

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and
well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Intertidal mud: Recover to reference condition

Intertidal mud is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Intertidal mud to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of intertidal mud in the biogeographic region are recovered such that the feature makes its contribution to the network.

Intertidal mud is sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes (sea level) - regional/national	H	L
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	M-H	H
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Removal of non-target species (lethal)	M	M
Temperature changes - regional/national	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L-H
Removal of target species (lethal)	NS-M	L-H
Salinity changes - local	L	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	L	H
Siltation rate changes (high)	L	H
Structural abrasion/penetration: Structural damage to seabed >25mm	L	H
Temperature changes - local	L	H

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Intertidal mixed sediment: Maintain in favourable condition

Intertidal mixed sediment is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Intertidal mixed sediments in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of Intertidal mixed sediments in the biogeographic region are maintained such that the feature makes its contribution to the network.

Intertidal mixed sediments is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Siltation rate changes (high)	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Atmospheric climate change	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Removal of non-target species (lethal)	M	L
Siltation rate changes (low)	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Water clarity changes	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Removal of target species (lethal)	L-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Intertidal mixed sediments: Recover to reference condition

Intertidal mixed sediment is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Intertidal mixed sediments to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of Intertidal mixed sediments in the biogeographic region are recovered such that the feature makes its contribution to the network.

Intertidal mixed sediment is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Siltation rate changes (high)	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Atmospheric climate change	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Removal of non-target species (lethal)	M	L
Siltation rate changes (low)	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Water clarity changes	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Removal of target species (lethal)	L-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Coastal saltmarshes and saline reedbeds: Maintain in favourable condition

Coastal saltmarshes and saline reedbeds is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Coastal saltmarshes and saline reedbeds in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of Coastal saltmarshes and saline reedbeds in the biogeographic region are maintained such that the feature makes its contribution to the network.

Coastal saltmarshes and saline reedbeds are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	H
Physical removal (extraction of substratum)	H	H
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Emergence regime changes (sea level) - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	M
Siltation rate changes (high)	M	M
Structural abrasion/penetration: Structural damage to seabed >25mm	M	M
Surface abrasion: damage to seabed surface features	M	M
Temperature changes - regional/national	M	L
Water flow (tidal current) changes - local	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Removal of target species (lethal)	L	M
Siltation rate changes (low)	L	M

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+]*Sensitivity and Confidence information extracted from national sensitivity matrices.*

Coastal saltmarsh and saline reedbeds: Recover to reference condition

The Coastal saltmarsh and saline reeedbeds FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the Coastal saltmarsh and saline reedbeds to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of coastal saltmarsh in the biogeographic region are recovered, such that the feature makes its contribution to the network.

Coastal saltmarshes and saline reedbeds are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	H
Physical removal (extraction of substratum)	H	H
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Emergence regime changes (sea level) - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	M
Siltation rate changes (high)	M	M
Structural abrasion/penetration: Structural damage to seabed >25mm	M	M
Surface abrasion: damage to seabed surface features	M	M
Temperature changes - regional/national	M	L
Water flow (tidal & ocean current) changes - regional/national	M	L
Water flow (tidal current) changes - local	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Removal of target species (lethal)	L	M
Siltation rate changes (low)	L	M

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Intertidal sediments dominated by aquatic angiosperms: Recover to ref. condition

Intertidal sediments dominated by aquatic angiosperms is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Intertidal sediments dominated by aquatic angiosperms to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of intertidal sediments dominated by aquatic angiosperms in the biogeographic region are recovered, such that the feature makes its contribution to the network.

Intertidal sediments dominated by aquatic angiosperms are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes (sea level) - regional/national	H	M
Physical loss (to land or freshwater habitat)	H	H
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	H
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M
Introduction or spread of non-indigenous species & translocations (competition)	M-H	L
Siltation rate changes (high)	M-H	L
Siltation rate changes (low)	L-H	L
Water clarity changes	L-H	L-M
Atmospheric climate change	M	M
Nitrogen & phosphorus enrichment	M	M
Temperature changes - regional/national	M	M
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Emergence regime changes - local	L-M	M
Surface abrasion: damage to seabed surface features	L-M	L-M
Organic enrichment	NS-M	M
Physical change (to another seabed type)	NS-M	M
Water flow (tidal & ocean current) changes - regional/national	NS-M	H
Water flow (tidal current) changes - local	NS-M	H

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices*

Intertidal biogenic reefs: Maintain in favourable condition

Intertidal biogenic reefs is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Intertidal biogenic reefs in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of intertidal biogenic reefs in the biogeographic region are maintained such that the feature makes its contribution to the network.

Intertidal biogenic reefs are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	M-H	L
Removal of non-target species (lethal)	M-H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Wave exposure changes - local	M-H	L
Wave exposure changes - regional/national	M-H	L
Emergence regime changes (sea level) - regional/national	L-H	L
Siltation rate changes (high)	L-H	L
Temperature changes - local	L-H	L
Physical change (to another seabed type)	NS-H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Temperature changes - regional/national	M	L
Surface abrasion: damage to seabed surface features	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L
Removal of target species (lethal)	NS-M	M
Water flow (tidal & ocean current) changes - regional/national	NS-M	L
Water flow (tidal current) changes - local	NS-M	L
Siltation rate changes (low)	NS-L	L
Water clarity changes	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

High energy infralittoral rock: Maintain in favourable condition

High energy infralittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the High energy infralittoral rock in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of high energy infralittoral rock in the biogeographic region are maintained such that the feature makes its contribution to the network.

High energy infralittoral rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Siltation rate changes (high)	M-H	L
Physical removal (extraction of substratum)	M	L
Removal of non-target species (lethal)	M	L
Removal of target species (lethal)	M	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	L-M	L
Water clarity changes	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

High energy infralittoral rock: Recover to favourable condition

High energy infralittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the High energy infralittoral rock to favourable condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of High energy infralittoral rock in the biogeographic region are recovered, such that the feature makes its contribution to the network.

High energy infralittoral rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Siltation rate changes (high)	M-H	L
Physical removal (extraction of substratum)	M	L
Removal of non-target species (lethal)	M	L
Removal of target species (lethal)	M	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	L-M	L
Water clarity changes	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

High energy infralittoral rock: Recover to reference condition

High energy infralittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the High energy infralittoral rock to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of high energy infralittoral rock in the biogeographic region are recovered, such that the feature makes its contribution to the network.

High energy infralittoral rock is sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Siltation rate changes (high)	M-H	L
Physical removal (extraction of substratum)	M	L
Removal of non-target species (lethal)	M	L
Removal of target species (lethal)	M	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	L-M	L
Water clarity changes	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Moderate energy infralittoral rock: Maintain in favourable condition

Moderate energy infralittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Moderate energy infralittoral rock in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of Moderate energy infralittoral rock in the biogeographic region are maintained, such that the feature makes its contribution to the network.

Moderate energy infralittoral rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Siltation rate changes (high)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Physical removal (extraction of substratum)	M	L
Removal of non-target species (lethal)	M	L
Removal of target species (lethal)	M	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	L-M	L
Water clarity changes	L-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Moderate energy infralittoral rock: Recover to favourable condition

Moderate energy infralittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Moderate energy infralittoral rock to favourable condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of moderate energy infralittoral rock in the biogeographic region are recovered, such that the feature makes its contribution to the network.

Moderate energy infralittoral rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Siltation rate changes (high)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Physical removal (extraction of substratum)	M	L
Removal of non-target species (lethal)	M	L
Removal of target species (lethal)	M	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	L-M	L
Water clarity changes	L-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Moderate energy infralittoral rock: Recover to reference condition

Moderate energy infralittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Moderate energy infralittoral rock to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of moderate energy infralittoral rock in the biogeographic region are recovered, such that the feature makes its contribution to the network.

Moderate energy infralittoral rock is sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Siltation rate changes (high)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Physical removal (extraction of substratum)	M	L
Removal of non-target species (lethal)	M	L
Removal of target species (lethal)	M	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	L-M	L
Water clarity changes	L-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices*

Low energy infralittoral rock: Maintain in favourable condition

Low energy infralittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Low energy infralittoral rock in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of low energy infralittoral rock in the biogeographic region are maintained such that the feature makes its contribution to the network.

Low energy infralittoral rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical change (to another seabed type)	M-H	L
Removal of target species (lethal)	M-H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M-H	L
Siltation rate changes (high)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Water clarity changes	L-H	L
Physical removal (extraction of substratum)	M	L
Removal of non-target species (lethal)	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L
Siltation rate changes (low)	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Low energy infralittoral rock: Recover to reference condition

Low energy infralittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Low energy infralittoral rock to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of low energy infralittoral rock in the biogeographic region are recovered such that the feature makes its contribution to the network.

Low energy infralittoral rock is sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical change (to another seabed type)	M-H	L
Removal of target species (lethal)	M-H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M-H	L
Siltation rate changes (high)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Water clarity changes	L-H	L
Physical removal (extraction of substratum)	M	L
Removal of non-target species (lethal)	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L
Siltation rate changes (low)	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

High energy circalittoral rock: Maintain in favourable condition

High energy circalittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy.Subject to natural change, maintain the High energy circalittoral rock in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of High energy circalittoral rock in the biogeographic region are maintained such that the feature makes its contribution to the network.

High energy circalittoral rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Salinity changes - local	H	L
Physical change (to another seabed type)	M-H	L
Physical removal (extraction of substratum)	M-H	L
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	M-H	L
Siltation rate changes (high)	M-H	L
Siltation rate changes (low)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Surface abrasion: damage to seabed surface features	M-H	L
Temperature changes - local	NS-H	L
Water clarity changes	NS-H	L
Removal of non-target species (lethal)	M	L
Removal of target species (lethal)	M	M
Temperature changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

High energy circalittoral rock: Recover to favourable condition

High energy circalittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the High energy circalittoral rock to favourable condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of high energy circalittoral rock in the biogeographic region are recovered such that the feature makes its contribution to the network.

High energy circalittoral rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Salinity changes - local	H	L
Physical change (to another seabed type)	M-H	L
Physical removal (extraction of substratum)	M-H	L
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	M-H	L
Siltation rate changes (high)	M-H	L
Siltation rate changes (low)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Surface abrasion: damage to seabed surface features	M-H	L
Temperature changes - local	NS-H	L
Water clarity changes	NS-H	L
Removal of non-target species (lethal)	M	L
Removal of target species (lethal)	M	M
Temperature changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

High energy circalittoral rock: Recover to reference condition

High energy circalittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the High energy circalittoral rock to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of high energy circalittoral rock in the biogeographic region are recovered such that the feature makes its contribution to the network.

High energy circalittoral rock is sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Salinity changes - local	H	L
Physical change (to another seabed type)	M-H	L
Physical removal (extraction of substratum)	M-H	L
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	M-H	L
Siltation rate changes (high)	M-H	L
Siltation rate changes (low)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Surface abrasion: damage to seabed surface features	M-H	L
Temperature changes - local	NS-H	L
Water clarity changes	NS-H	L
Removal of non-target species (lethal)	M	L
Removal of target species (lethal)	M	M
Temperature changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Moderate energy circalittoral rock: Maintain in favourable condition

Moderate energy circalittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy.Subject to natural change, maintain the Moderate energy circalittoral rock in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of moderate energy circalittoral rock in the biogeographic region are maintained such that the feature makes its contribution to the network.

Moderate energy circalittoral rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical change (to another seabed type)	M-H	L
Physical removal (extraction of substratum)	M-H	L
Removal of non-target species (lethal)	M-H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M-H	L
Siltation rate changes (high)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Salinity changes - local	L-H	L
Surface abrasion: damage to seabed surface features	L-H	L
Siltation rate changes (low)	NS-H	L
Temperature changes - local	NS-H	L
Water clarity changes	NS-H	L
Temperature changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	L-M	L
Removal of target species (lethal)	NS-M	H
Wave exposure changes - local	NS-M	L
Wave exposure changes - regional/national	NS-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Moderate energy circalittoral rock: Recover to favourable condition

Moderate energy circalittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Moderate energy circalittoral rock to favourable condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of moderate energy circalittoral rock in the biogeographic region are recovered such that the feature makes its contribution to the network.

Moderate energy circalittoral rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical change (to another seabed type)	M-H	L
Physical removal (extraction of substratum)	M-H	L
Removal of non-target species (lethal)	M-H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M-H	L
Siltation rate changes (high)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Salinity changes - local	L-H	L
Surface abrasion: damage to seabed surface features	L-H	L
Siltation rate changes (low)	NS-H	L
Temperature changes - local	NS-H	L
Water clarity changes	NS-H	L
Temperature changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	L-M	L
Removal of target species (lethal)	NS-M	H
Wave exposure changes - local	NS-M	L
Wave exposure changes - regional/national	NS-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Moderate energy circalittoral rock: Recover to reference condition

Moderate energy circalittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Moderate energy circalittoral rock to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of moderate energy circalittoral rock in the biogeographic region are recovered such that the feature makes its contribution to the network.

Moderate energy circalittoral rock is sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical change (to another seabed type)	M-H	L
Physical removal (extraction of substratum)	M-H	L
Removal of non-target species (lethal)	M-H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M-H	L
Siltation rate changes (high)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Salinity changes - local	L-H	L
Surface abrasion: damage to seabed surface features	L-H	L
Siltation rate changes (low)	NS-H	L
Temperature changes - local	NS-H	L
Water clarity changes	NS-H	L
Temperature changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	L-M	L
Removal of target species (lethal)	NS-M	H
Wave exposure changes - local	NS-M	L
Wave exposure changes - regional/national	NS-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Low energy circalittoral rock: Maintain in favourable condition

Low energy circalittoral rock is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the low energy circalittoral rock in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of low energy circalittoral rock in the biogeographic region are maintained such that the feature makes its contribution to the network.

Low energy circalittoral rock is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Removal of non-target species (lethal)	L-H	L
Physical change (to another seabed type)	M	L
Physical removal (extraction of substratum)	M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Siltation rate changes (high)	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Water clarity changes	M	L
Salinity changes - local	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L
Siltation rate changes (low)	NS-M	L
Water flow (tidal & ocean current) changes - regional/national	NS-L	L
Water flow (tidal current) changes - local	NS-L	L
Wave exposure changes - local	NS-L	L
Wave exposure changes - regional/national	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal coarse sediment: Maintain in favourable condition

Subtidal coarse sediment is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Subtidal coarse sediment in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal coarse sediment in the biogeographic region are maintained such that the feature makes its contribution to the network.

Subtidal coarse sediment is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	L-H	L
Surface abrasion: damage to seabed surface features	NS-H	L
Physical change (to another seabed type)	M	L
Salinity changes - local	L-M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	L-M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L
Removal of non-target species (lethal)	NS-M	L
Siltation rate changes (high)	NS-M	L
Siltation rate changes (low)	NS-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal coarse sediment: Recover to favourable condition

Subtidal coarse sediment is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Subtidal coarse sediment to favourable condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal coarse sediment in the biogeographic region are recovered.

Subtidal coarse sediment is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	L-H	L
Surface abrasion: damage to seabed surface features	NS-H	L
Physical change (to another seabed type)	M	L
Salinity changes - local	L-M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	L-M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L
Removal of non-target species (lethal)	NS-M	L
Siltation rate changes (high)	NS-M	L
Siltation rate changes (low)	NS-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal coarse sediment: Recover to reference condition

Subtidal coarse sediment is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Subtidal coarse sediment to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal coarse sediment in the biogeographic region are recovered such that the feature makes its contribution to the network.

Subtidal coarse sediment is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	L-H	L
Surface abrasion: damage to seabed surface features	NS-H	L
Physical change (to another seabed type)	M	L
Salinity changes - local	L-M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	L-M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L
Removal of non-target species (lethal)	NS-M	L
Siltation rate changes (high)	NS-M	L
Siltation rate changes (low)	NS-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal sand: Maintain in favourable condition

Subtidal sand is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Subtidal sand in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal sand in the biogeographic region are maintained such that the feature makes its contribution to the network.

Subtidal sand is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Siltation rate changes (high)	H	L
Physical removal (extraction of substratum)	L-H	M
Siltation rate changes (low)	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	L-M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	L-M	L-M
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L
Removal of non-target species (lethal)	NS-M	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	NS-M	L
Surface abrasion: damage to seabed surface features	NS-M	L
Water flow (tidal & ocean current) changes - regional/national	NS-L	L
Water flow (tidal current) changes - local	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal sand: Recover to favourable condition

Subtidal sand is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Subtidal sand to favourable condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal sand in the biogeographic region are recovered such that the feature makes its contribution to the network.

Subtidal sand is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Siltation rate changes (high)	H	L
Physical removal (extraction of substratum)	L-H	M
Siltation rate changes (low)	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	L-M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	L-M	L-M
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L
Removal of non-target species (lethal)	NS-M	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	NS-M	L
Surface abrasion: damage to seabed surface features	NS-M	L
Water flow (tidal & ocean current) changes - regional/national	NS-L	L
Water flow (tidal current) changes - local	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal sand: Recover to reference condition

Subtidal sand is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Subtidal sand to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal sand in the biogeographic region are recovered such that the feature makes its contribution to the network.

Subtidal sand is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Siltation rate changes (high)	H	L
Physical removal (extraction of substratum)	L-H	M
Siltation rate changes (low)	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	L-M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	L-M	L-M
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L
Removal of non-target species (lethal)	NS-M	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	NS-M	L
Surface abrasion: damage to seabed surface features	NS-M	L
Water flow (tidal & ocean current) changes - regional/national	NS-L	L
Water flow (tidal current) changes - local	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal mud: Maintain in favourable condition

Subtidal mud is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Subtidal mud in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of Subtidal mud in the biogeographic region are maintained such that the feature makes its contribution to the network.

Subtidal mud is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Organic enrichment	NS-H	L
Physical change (to another seabed type)	M	L
Physical removal (extraction of substratum)	M	L
Removal of non-target species (lethal)	M	L-H
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	M	L
Siltation rate changes (high)	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Temperature changes - local	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	L-M	L
Surface abrasion: damage to seabed surface features	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L
Removal of target species (lethal)	NS-M	L-H
Siltation rate changes (low)	NS-L	L
Water flow (tidal & ocean current) changes - regional/national	NS-L	L
Water flow (tidal current) changes - local	NS-L	L
Wave exposure changes - local	NS-L	L
Wave exposure changes - regional/national	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal mud: Recover to favourable condition

Subtidal mud is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Subtidal mud to favourable condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal mud in the biogeographic region are recovered such that the feature makes its contribution to the network.

Subtidal mud is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Organic enrichment	NS-H	L
Physical change (to another seabed type)	M	L
Physical removal (extraction of substratum)	M	L
Removal of non-target species (lethal)	M	L-H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Siltation rate changes (high)	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Temperature changes - local	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	L-M	L
Surface abrasion: damage to seabed surface features	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L
Removal of target species (lethal)	NS-M	L-H
Siltation rate changes (low)	NS-L	L
Water flow (tidal & ocean current) changes - regional/national	NS-L	L
Water flow (tidal current) changes - local	NS-L	L
Wave exposure changes - local	NS-L	L
Wave exposure changes - regional/national	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal mud: Recover to reference condition

Subtidal mud is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Subtidal mud to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal mud in the biogeographic region are recovered such that the feature makes its contribution to the network.

Subtidal mud is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Organic enrichment	NS-H	L
Physical change (to another seabed type)	M	L
Physical removal (extraction of substratum)	M	L
Removal of non-target species (lethal)	M	L-H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Siltation rate changes (high)	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Temperature changes - local	M	L
Temperature changes - regional/national	M	L
Salinity changes - local	L-M	L
Surface abrasion: damage to seabed surface features	L-M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L
Removal of target species (lethal)	NS-M	L-H
Siltation rate changes (low)	NS-L	L
Water flow (tidal & ocean current) changes - regional/national	NS-L	L
Water flow (tidal current) changes - local	NS-L	L
Wave exposure changes - local	NS-L	L
Wave exposure changes - regional/national	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal mixed sediments: Maintain in favourable condition

Subtidal mixed sediments is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Subtidal mixed sediments in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal mixed sediments in the biogeographic region are maintained such that the feature makes its contribution to the network.

Subtidal mixed sediments is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Introduction of microbial pathogens (disease)	NS-H	L
Salinity changes - local	NS-H	L
Removal of non-target species (lethal)	M	M
Siltation rate changes (high)	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - local	M	L
Temperature changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	L-M	M
Water clarity changes	NS-M	L
Removal of target species (lethal)	L	M
Water flow (tidal & ocean current) changes - regional/national	NS-L	L
Water flow (tidal current) changes - local	NS-L	L
Wave exposure changes - local	NS-L	L
Wave exposure changes - regional/national	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal mixed sediments: Recover to favourable condition

Subtidal mixed sediments is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Subtidal mixed sediments to favourable condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal mixed sediments in the biogeographic region are recovered such that the feature makes its contribution to the network.

Subtidal mixed sediments are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Introduction of microbial pathogens (disease)	NS-H	L
Salinity changes - local	NS-H	L
Removal of non-target species (lethal)	M	M
Siltation rate changes (high)	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - local	M	L
Temperature changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	L-M	M
Water clarity changes	NS-M	L
Removal of target species (lethal)	L	M
Water flow (tidal & ocean current) changes - regional/national	NS-L	L
Water flow (tidal current) changes - local	NS-L	L
Wave exposure changes - local	NS-L	L
Wave exposure changes - regional/national	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal mixed sediments: Recover to reference condition

Subtidal mixed sediments is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Subtidal mixed sediments to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal mixed sediments in the biogeographic region are recovered such that the feature makes its contribution to the network.

Subtidal mixed sediments are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Introduction of microbial pathogens (disease)	NS-H	L
Salinity changes - local	NS-H	L
Removal of non-target species (lethal)	M	M
Siltation rate changes (high)	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - local	M	L
Temperature changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	L-M	M
Water clarity changes	NS-M	L
Removal of target species (lethal)	L	M
Water flow (tidal & ocean current) changes - regional/national	NS-L	L
Water flow (tidal current) changes - local	NS-L	L
Wave exposure changes - local	NS-L	L
Wave exposure changes - regional/national	NS-L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal macrophyte-dominated sediment: Maintain in favourable condition

Subtidal macrophyte-dominated sediment is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, maintain the Subtidal macrophyte-dominated sediment in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal macrophyte-dominated sediment in the biogeographic region are maintained such that the feature makes its contribution to the network.

Subtidal macrophyte-dominated sediment is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Introduction or spread of non-indigenous species & translocations (competition)	M-H	L
Physical change (to another seabed type)	M-H	L
Physical removal (extraction of substratum)	M-H	L
Siltation rate changes (high)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	L-H	L
Surface abrasion: damage to seabed surface features	L-H	L
Water clarity changes	L-H	L
Removal of non-target species (lethal)	NS-H	L
Removal of target species (lethal)	NS-H	L
Salinity changes - local	NS-H	L
Siltation rate changes (low)	NS-H	L
Temperature changes - local	NS-H	M
Temperature changes - regional/national	M	L
Organic enrichment	NS-M	L
Water flow (tidal & ocean current) changes - regional/national	NS-M	L
Water flow (tidal current) changes - local	NS-M	L
Wave exposure changes - local	NS-M	L
Wave exposure changes - regional/national	NS-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal macrophyte-dominated sediment: Recover to reference condition

Subtidal macrophyte-dominated sediment is a widespread broad-scale habitat that must be represented in the network to meet the ENG principles of representativity and adequacy. Subject to natural change, recover the Subtidal macrophyte-dominated sediment to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal macrophyte-dominated sediment in the biogeographic region are recovered such that the feature makes its contribution to the network.

Subtidal macrophyte-dominated sediment is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Introduction or spread of non-indigenous species & translocations (competition)	M-H	L
Physical change (to another seabed type)	M-H	L
Physical removal (extraction of substratum)	M-H	L
Siltation rate changes (high)	M-H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M-H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	L-H	L
Surface abrasion: damage to seabed surface features	L-H	L
Water clarity changes	L-H	L
Removal of non-target species (lethal)	NS-H	L
Removal of target species (lethal)	NS-H	L
Salinity changes - local	NS-H	L
Siltation rate changes (low)	NS-H	L
Temperature changes - local	NS-H	M
Temperature changes - regional/national	M	L
Organic enrichment	NS-M	L
Water flow (tidal & ocean current) changes - regional/national	NS-M	L
Water flow (tidal current) changes - local	NS-M	L
Wave exposure changes - local	NS-M	L
Wave exposure changes - regional/national	NS-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Deep-sea bed: Recover to favourable condition

Within the context of the nation MCZ project area, the Deep-sea bed broad-scale habitat is unique to the south-west region and therefore must be represented in the network in order to meet the ENG principle of representativity. Subject to natural change, recover the Deep-sea bed to favourable condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of deep-sea bed in the biogeographic region are recovered such that the feature makes its contribution to the network.

Deep-sea bed is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical removal (extraction of substratum)	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Surface abrasion: damage to seabed surface features	H	L
Water flow (tidal & ocean current) changes - regional/national	H	L
Siltation rate changes (high)	L-H	L
Siltation rate changes (low)	L-H	L
Organic enrichment	NS-H	L
Removal of non-target species (lethal)	NS-H	L
Removal of target species (lethal)	NS-H	L
Temperature changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Deep-sea bed: Recover to reference condition

Within the context of the nation MCZ project area, the Deep-sea bed broad-scale habitat is unique to the south-west region and therefore must be represented in the network in order to meet the ENG principle of representativity. Subject to natural change, recover the Deep-sea bed to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of deep-sea bed in the biogeographic region are recovered such that the feature makes its contribution to the network.

Deep-sea bed is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical removal (extraction of substratum)	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Surface abrasion: damage to seabed surface features	H	L
Water flow (tidal & ocean current) changes - regional/national	H	L
Siltation rate changes (high)	L-H	L
Siltation rate changes (low)	L-H	L
Organic enrichment	NS-H	L
Removal of non-target species (lethal)	NS-H	L
Removal of target species (lethal)	NS-H	L
Temperature changes - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	NS-M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Draft conservation objectives for habitat FOCI

Blue mussel beds (including intertidal beds on mixed and sandy sediments): Maintain in favourable condition

The Blue Mussel beds (including intertidal beds on mixed and sandy sediments) FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the Blue Mussel beds (including intertidal beds on mixed and sandy sediments) in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of blue mussel beds (including intertidal beds on mixed and sandy sediments) in the biogeographic region are maintained such that the feature makes its contribution to the network.

Blue Mussel beds (including intertidal beds on mixed and sandy sediments) are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Siltation rate changes (high)	H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	M
Physical removal (extraction of substratum)	M	L
Removal of non-target species (lethal)	M	H
Removal of target species (lethal)	M	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Emergence regime changes (sea level) - regional/national	L	L
Siltation rate changes (low)	L	M
Temperature changes - local	L	L
Water clarity changes	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Blue mussel beds (including intertidal beds on mixed and sandy sediments): Recover to reference condition

The Blue Mussel beds (including intertidal beds on mixed and sandy sediments) FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the Blue Mussel beds (including intertidal beds on mixed and sandy sediments) to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of blue mussel beds (including intertidal beds on mixed and sandy sediments) in the biogeographic region are recovered such that the feature makes its contribution to the network.

Blue Mussel beds (including intertidal beds on mixed and sandy sediments) are sensitive to the pressures:.

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Siltation rate changes (high)	H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	M
Physical removal (extraction of substratum)	M	L
Removal of non-target species (lethal)	M	H
Removal of target species (lethal)	M	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Emergence regime changes (sea level) - regional/national	L	L
Siltation rate changes (low)	L	M
Temperature changes - local	L	L
Water clarity changes	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Cold-water coral reefs: Recover to favourable condition

Within the context of the national MCZ project area, the Cold-water coral reef FOCI habitat is unique to the south-west region and therefore must be represented in the network in order to meet the ENG principle of representativity. Subject to natural change, recover the Cold-water coral reefs to favourable condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of cold-water coral reefs in the biogeographic region are recovered such that the feature makes its contribution to the network.

Cold-water coral reefs are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Organic enrichment	H	L
Physical change (to another seabed type)	H	H
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	H
Removal of non-target species (lethal)	H	H
Salinity changes - local	H	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	H
Siltation rate changes (high)	H	H
Siltation rate changes (low)	H	H
Structural abrasion/penetration: Structural damage to seabed >25mm	H	H
Surface abrasion: damage to seabed surface features	H	H
Temperature changes - local	H	L-H
Water flow (tidal & ocean current) changes - regional/national	H	L
Water flow (tidal current) changes - local	H	M
Temperature changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Cold water coral reefs: Recover to reference condition

Within the context of the national MCZ project area, the Cold-water coral reef FOCI habitat is unique to the south-west region and therefore must be represented in the network in order to meet the ENG principle of representativity. Subject to natural change, recover the Cold-water coral reefs to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of cold-water coral reefs in the biogeographic region are recovered such that the feature makes its contribution to the network.

Cold-water coral reefs are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Organic enrichment	H	L
Physical change (to another seabed type)	H	H
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	H
Removal of non-target species (lethal)	H	H
Salinity changes - local	H	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	H
Siltation rate changes (high)	H	H
Siltation rate changes (low)	H	H
Structural abrasion/penetration: Structural damage to seabed >25mm	H	H
Surface abrasion: damage to seabed surface features	H	H
Temperature changes - local	H	L-H
Water flow (tidal & ocean current) changes - regional/national	H	L
Water flow (tidal current) changes - local	H	M
Temperature changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Estuarine rocky habitats: Maintain in favourable condition

The Estuarine rocky habitats FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the Estuarine rocky habitats in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of estuarine rocky habitats in the biogeographic region are maintained such that the feature makes its contribution to the network.

Estuarine rocky habitats are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes (sea level) - regional/national	H	L
Introduction or spread of non-indigenous species & translocations (competition)	H	L
Physical loss (to land or freshwater habitat)	H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Introduction of microbial pathogens (disease)	M	L
Physical change (to another seabed type)	M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Temperature changes - regional/national	M	L
Removal of target species (lethal)	L	L
Salinity changes - local	L	L
Siltation rate changes (high)	L	L
Temperature changes - local	L	M

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Estuarine rocky habitats: Recover to reference condition

The Estuarine rocky habitats FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the Estuarine rocky habitats to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of estuarine rocky habitats in the biogeographic region are recovered such that the feature makes its contribution to the network.

Estuarine rocky habitats are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes (sea level) - regional/national	H	L
Introduction or spread of non-indigenous species & translocations (competition)	H	L
Physical loss (to land or freshwater habitat)	H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Introduction of microbial pathogens (disease)	M	L
Physical change (to another seabed type)	M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Temperature changes - regional/national	M	L
Removal of target species (lethal)	L	L
Salinity changes - local	L	L
Siltation rate changes (high)	L	L
Temperature changes - local	L	M

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Fragile sponge and anthozoan communities on subtidal rocky habitats: Maintain in favourable condition

The Fragile sponge & anthozoan communities on subtidal rocky habitats FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the Fragile sponge & anthozoan communities on subtidal rocky habitats in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of fragile sponge & anthozoan communities on subtidal rocky habitats in the biogeographic region are maintained such that the feature makes its contribution to the network.

Fragile sponge & anthozoan communities on subtidal rocky habitats are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Removal of non-target species (lethal)	H	L
Salinity changes - local	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	H	L
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Surface abrasion: damage to seabed surface features	H	L-H
Introduction or spread of non-indigenous species & translocations (competition)	M-H	L
Temperature changes - local	M	L
Temperature changes - regional/national	M	L
Water flow (tidal & ocean current) changes - regional/national	M	L
Water flow (tidal current) changes - local	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Fragile sponge and anthozoan communities on subtidal rocky habitats: Recover to favourable condition

The Fragile sponge & anthozoan communities on subtidal rocky habitats FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the Fragile sponge & anthozoan communities on subtidal rocky habitats to favourable condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of fragile sponge&anthozoan communities on subtidal rocky habitats in the biogeographic region are recovered such that the feature makes its contribution to the network.

Fragile sponge & anthozoan communities on subtidal rocky habitats is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Removal of non-target species (lethal)	H	L
Salinity changes - local	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	L
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Surface abrasion: damage to seabed surface features	H	L-H
Introduction or spread of non-indigenous species & translocations (competition)	M-H	L
Temperature changes - local	M	L
Temperature changes - regional/national	M	L
Water flow (tidal & ocean current) changes - regional/national	M	L
Water flow (tidal current) changes - local	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Fragile sponge and anthozoan communities on subtidal rocky habitats: Recover to reference condition

The Fragile sponge & anthozoan communities on subtidal rocky habitats FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the Fragile sponge & anthozoan communities on subtidal rocky habitats to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of fragile sponge & anthozoan communities on subtidal rocky habitats in the biogeographic region are recovered such that the feature makes its contribution to the network.

Fragile sponge & anthozoan communities on subtidal rocky habitats are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Removal of non-target species (lethal)	H	L
Salinity changes - local	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	L
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Surface abrasion: damage to seabed surface features	H	L-H
Introduction or spread of non-indigenous species & translocations (competition)	M-H	L
Temperature changes - local	M	L
Temperature changes - regional/national	M	L
Water flow (tidal & ocean current) changes - regional/national	M	L
Water flow (tidal current) changes - local	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Intertidal under boulder communities: Maintain in favourable condition

The Intertidal under boulder communities FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the Intertidal under boulder communities in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of intertidal under boulder communities in the biogeographic region are maintained such that the feature makes its contribution to the network.

Intertidal under boulder communities are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Emergence regime changes (sea level) - regional/national	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Removal of target species (lethal)	M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Siltation rate changes (high)	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - regional/national	M	L
Emergence regime changes - local	L	L
Salinity changes - local	L	L
Siltation rate changes (low)	L	L
Temperature changes - local	L	L
Water flow (tidal current) changes - local	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Maerl beds: Maintain in favourable condition

The Maerl beds FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the Maerl beds in favourable condition, such that the:
- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of maërl beds in the biogeographic region are maintained such that the feature makes its contribution to the network.

Maerl beds are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Introduction or spread of non-indigenous species & translocations (competition)	H	L
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	H
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	L
Removal of target species (lethal)	H	L
Salinity changes - local	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	M
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M-H
Surface abrasion: damage to seabed surface features	H	L
Temperature changes - local	H	L
Water clarity changes	H	L
Atmospheric climate change	M	L
Temperature changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Maerl beds: Recover to reference condition

The Maerl beds FOCI is listed in the ENG as a feature that has to be represented in the network.

Subject to natural change, recover the Maerl beds to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of maërl beds in the biogeographic region are recovered such that the feature makes its contribution to the network.

Maerl beds are sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Introduction or spread of non-indigenous species & translocations (competition)	H	L
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	H
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	L
Removal of target species (lethal)	H	L
Salinity changes - local	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	M
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M-H
Surface abrasion: damage to seabed surface features	H	L
Temperature changes - local	H	L
Water clarity changes	H	L
Atmospheric climate change	M	L
Temperature changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Mud habitats in deep water: Maintain in favourable condition

The Mud habitats in deep water FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the Mud habitats in deep water in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of mud habitats in deep water in the biogeographic region are maintained such that the feature makes its contribution to the network.

Mud habitats in deep water are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Organic enrichment	H	M
Physical change (to another seabed type)	H	L
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	H
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	H	M
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M
Temperature changes - regional/national	M	L
Removal of target species (lethal)	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Mud Habitats in Deep Water: Recover to favourable condition

The Mud Habitats in Deep Water FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the Mud habitats in deep water to favourable condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of mud habitats in deep water in the biogeographic region are recovered such that the feature makes its contribution to the network.

Mud habitats in deep water is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Organic enrichment	H	M
Physical change (to another seabed type)	H	L
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	M
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M
Temperature changes - regional/national	M	L
Removal of target species (lethal)	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Mud Habitats in Deep Water: Recover to reference condition

The Mud Habitats in Deep Water FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the Mud habitats in deep water to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of mud habitats in deep water in the biogeographic region are recovered such that the feature makes its contribution to the network.

Mud habitats in deep water are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Organic enrichment	H	M
Physical change (to another seabed type)	H	L
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	H
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	H	M
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M
Temperature changes - regional/national	M	L
Removal of target species (lethal)	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Peat and clay exposures: Maintain in favourable condition

Peat and clay exposures are a FOCI habitat that must be represented in the network to meet the ENG principles. Subject to natural change, maintain the peat and clay exposures in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes

representative of peat and clay exposures in the biogeographic region are maintained such that the feature makes its contribution to the network.

Peat and clay exposures are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes (sea level) - regional/national	H	L
Physical change (to another seabed type)	H	H
Physical loss (to land or freshwater habitat)	H	H
Atmospheric climate change	M	L
Temperature changes - regional/national	M	L
Emergence regime changes - local	L	L
Physical removal (extraction of substratum)	L	M
Removal of non-target species (lethal)	L	L
Siltation rate changes (high)	L	M
Structural abrasion/penetration: Structural damage to seabed >25mm	L	M
Wave exposure changes - local	L	L
Wave exposure changes - regional/national	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+]*Sensitivity and Confidence information extracted from national sensitivity matrices.*

Sabellaria alveolata reefs: Maintain in favourable condition

The *Sabellaria alveolata* reefs FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Sabellaria alveolata* reefs in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of *Sabellaria alveolata* reefs in the biogeographic region are maintained such that the feature makes its contribution to the network.

Sabellaria alveolata reefs are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Removal of non-target species (lethal)	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Temperature changes - local	H	M
Wave exposure changes - local	H	L
Wave exposure changes - regional/national	H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Emergence regime changes (sea level) - regional/national	M	L
Temperature changes - regional/national	M	L
Water flow (tidal current) changes - local	M	L
Siltation rate changes (high)	L	L
Surface abrasion: damage to seabed surface features	L	H

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Sabellaria alveolata reefs: Recover to reference condition

The *Sabellaria alveolata* reefs FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Sabellaria alveolata* reefs to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of *Sabellaria alveolata* reefs in the biogeographic region are recovered such that the feature makes its contribution to the network.

Sabellaria alveolata reefs are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Removal of non-target species (lethal)	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Temperature changes - local	H	M
Wave exposure changes - local	H	L
Wave exposure changes - regional/national	H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Emergence regime changes (sea level) - regional/national	M	L
Temperature changes - regional/national	M	L
Water flow (tidal current) changes - local	M	L
Siltation rate changes (high)	L	L
Surface abrasion: damage to seabed surface features	L	H

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Seagrass beds: Maintain in favourable condition

The Seagrass beds FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the Seagrass beds in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of seagrass beds in the biogeographic region are maintained such that the feature makes its contribution to the network.

Seagrass beds are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes (sea level) - regional/national	H	M
Physical loss (to land or freshwater habitat)	H	H
Physical removal (extraction of substratum)	H	L-H
Removal of non-target species (lethal)	H	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	H
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L-H
Introduction or spread of non-indigenous species & translocations (competition)	M-H	L-M
Siltation rate changes (high)	M-H	L
Siltation rate changes (low)	L-H	L
Water clarity changes	L-H	L-M
Atmospheric climate change	M	M
Nitrogen & phosphorus enrichment	M	M
Physical change (to another seabed type)	M	L
Temperature changes - regional/national	M	M
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Emergence regime changes - local	L-M	M
Surface abrasion: damage to seabed surface features	L-M	L-M
Organic enrichment	NS-M	M
Water flow (tidal & ocean current) changes - regional/national	NS-M	H
Water flow (tidal current) changes - local	NS-M	H

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Seagrass beds: Recover to favourable condition

The Seagrass beds FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the Seagrass beds to favourable condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of seagrass beds in the biogeographic region are recovered such that the feature makes its contribution to the network.

Seagrass beds are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes (sea level) - regional/national	H	M
Physical loss (to land or freshwater habitat)	H	H
Physical removal (extraction of substratum)	H	L-H
Removal of non-target species (lethal)	H	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	H
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L-H
Introduction or spread of non-indigenous species & translocations (competition)	M-H	L-M
Siltation rate changes (high)	M-H	L
Siltation rate changes (low)	L-H	L
Water clarity changes	L-H	L-M
Atmospheric climate change	M	M
Nitrogen & phosphorus enrichment	M	M
Physical change (to another seabed type)	M	L
Temperature changes - regional/national	M	M
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Emergence regime changes - local	L-M	M
Surface abrasion: damage to seabed surface features	L-M	L-M
Organic enrichment	NS-M	M
Water flow (tidal & ocean current) changes - regional/national	NS-M	H
Water flow (tidal current) changes - local	NS-M	H

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Seagrass beds: Recover to reference condition

The Seagrass beds FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the Seagrass beds to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of seagrass beds in the biogeographic region are recovered such that the feature makes its contribution to the network.

Seagrass beds are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes (sea level) - regional/national	H	M
Physical loss (to land or freshwater habitat)	H	H
Physical removal (extraction of substratum)	H	L-H
Removal of non-target species (lethal)	H	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	H
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L-H
Introduction or spread of non-indigenous species & translocations (competition)	M-H	L-M
Siltation rate changes (high)	M-H	L
Siltation rate changes (low)	L-H	L
Water clarity changes	L-H	L-M
Atmospheric climate change	M	M
Nitrogen & phosphorus enrichment	M	M
Physical change (to another seabed type)	M	L
Temperature changes - regional/national	M	M
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Emergence regime changes - local	L-M	M
Surface abrasion: damage to seabed surface features	L-M	L-M
Organic enrichment	NS-M	M
Water flow (tidal & ocean current) changes - regional/national	NS-M	H
Water flow (tidal current) changes - local	NS-M	H

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Sheltered muddy gravels: Maintain in favourable condition

The Sheltered muddy gravels FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the Sheltered muddy gravels in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of sheltered muddy gravels in the biogeographic region are maintained such that the feature makes its contribution to the network.

Sheltered muddy gravels are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Siltation rate changes (high)	H	M
Atmospheric climate change	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Removal of non-target species (lethal)	M	M
Removal of target species (lethal)	M	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	M
Siltation rate changes (low)	M	M
Structural abrasion/penetration: Structural damage to seabed >25mm	M	M
Surface abrasion: damage to seabed surface features	M	M
Temperature changes - regional/national	M	L
Water clarity changes	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Sheltered muddy gravels: Recover to reference condition

The Sheltered muddy gravels FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the sheltered muddy gravels to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of sheltered muddy gravels in the biogeographic region are recovered such that the feature makes its contribution to the network.

Sheltered muddy gravels are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Siltation rate changes (high)	H	M
Atmospheric climate change	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Removal of non-target species (lethal)	M	M
Removal of target species (lethal)	M	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	M
Siltation rate changes (low)	M	M
Structural abrasion/penetration: Structural damage to seabed >25mm	M	M
Surface abrasion: damage to seabed surface features	M	M
Temperature changes - regional/national	M	L
Water clarity changes	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal Chalk: Recover to favourable condition

The Subtidal chalk FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the Subtidal chalk to favourable condition by 2020, and maintain thereafter, such
that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal chalk in the biogeographic region are recovered such that the feature makes its contribution to the network.

Subtidal chalk is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	H
Physical loss (to land or freshwater habitat)	H	H
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical removal (extraction of substratum)	M	M
Siltation rate changes (high)	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	M
Temperature changes - local	M	L
Temperature changes - regional/national	M	L
Water clarity changes	NS-M	M
Organic enrichment	L	L
Removal of non-target species (lethal)	L	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	L	L
Siltation rate changes (low)	L	H
Surface abrasion: damage to seabed surface features	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Subtidal Chalk: Recover to reference condition

The Subtidal chalk FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the Subtidal chalk to reference condition by 2020, and maintain thereafter, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of subtidal chalk in the biogeographic region are recovered such that the feature makes its contribution to the network.

Subtidal chalk is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	H
Physical loss (to land or freshwater habitat)	H	H
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical removal (extraction of substratum)	M	M
Siltation rate changes (high)	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	M
Temperature changes - local	M	L
Temperature changes - regional/national	M	L
Water clarity changes	NS-M	M
Organic enrichment	L	L
Removal of non-target species (lethal)	L	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	L	L
Siltation rate changes (low)	L	H
Surface abrasion: damage to seabed surface features	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Tide-swept channels: Maintain in favourable condition

The Tide-swept channels FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the Tide-swept channels in favourable condition, such that the:

- extent;
- diversity;
- community structure;
- natural environmental quality; and
- natural environmental processes representative of tide-swept channels in the biogeographic region are maintained such that the feature makes its contribution to the network.

Tide-swept channels are sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	H
Physical loss (to land or freshwater habitat)	H	H
Physical removal (extraction of substratum)	H	M
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M
Atmospheric climate change	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Removal of non-target species (lethal)	M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	M
Surface abrasion: damage to seabed surface features	M	M
Temperature changes - regional/national	M	L
Siltation rate changes (high)	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Draft conservation objectives for benthic FOCI species

Padina pavonica: Maintain in favourable condition

The *Padina pavonica* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Padina pavonica* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of Padina pavonica in the biogeographic region are maintained such that the species makes its contribution to the network.

Padina pavonica is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes - local	H	L
Introduction or spread of non-indigenous species & translocations (competition)	H	L
Physical change (to another seabed type)	H	M
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	M
Salinity changes - local	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	M
Siltation rate changes (high)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M
Surface abrasion: damage to seabed surface features	H	M
Water clarity changes	H	L
Wave exposure changes - local	H	M
Atmospheric climate change	M	L
Salinity changes - regional/national	M	L
Siltation rate changes (low)	M	M
Water flow (tidal & ocean current) changes - regional/national	M	L
Water flow (tidal current) changes - local	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Padina pavonica: Recover to reference condition

The *Padina pavonica* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Padina pavonica* to reference condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Padina pavonica* in the biogeographic region are recovered such that the species makes its contribution to the network.

Padina pavonica is sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes - local	H	L
Introduction or spread of non-indigenous species & translocations (competition)	H	L
Physical change (to another seabed type)	H	M
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	M
Salinity changes - local	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	M
Siltation rate changes (high)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M
Surface abrasion: damage to seabed surface features	H	M
Water clarity changes	H	L
Wave exposure changes - local	H	M
Atmospheric climate change	M	L
Salinity changes - regional/national	M	L
Siltation rate changes (low)	M	M
Water flow (tidal & ocean current) changes - regional/national	M	L
Water flow (tidal current) changes - local	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Cruoria cruoriaeformis: Maintain in favourable condition

The *Cruoria cruoriaeformis* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Cruoria cruoriaeformis* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Cruoria cruoriaeformis* in the biogeographic region are maintained such that the species makes its contribution to the network.

Cruoria cruoriaeformis is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Introduction or spread of non-indigenous species & translocations (competition)	H	L
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	H
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	L
Salinity changes - local	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	M
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M-H
Surface abrasion: damage to seabed surface features	H	L
Temperature changes - local	H	L
Water clarity changes	H	L
Atmospheric climate change	M	L
Temperature changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Cruoria cruoriaeformis: Recover to reference condition

The *Cruoria cruoriaeformis* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Cruoria cruoriaeformis* to reference condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes

representative of *Cruoria cruoriaeformis* in the biogeographic region are recovered such that the species makes its contribution to the network.

Cruoria cruoriaeformis is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Introduction or spread of non-indigenous species & translocations (competition)	H	L
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	H
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	L
Salinity changes - local	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	M
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M-H
Surface abrasion: damage to seabed surface features	H	L
Temperature changes - local	H	L
Water clarity changes	H	L
Atmospheric climate change	M	L
Temperature changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Grateloupia montagnei: Recover to reference condition

The *Grateloupia montagnei* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Grateloupia montagnei* to reference condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes

representative of *Grateloupia montagnei* in the biogeographic region are recovered such that the species makes its contribution to the network.

Grateloupia montagnei is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Salinity changes - local	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	L
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Surface abrasion: damage to seabed surface features	H	L
Temperature changes - local	H	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Water clarity changes	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Lithothamnion corallioides: Recover to reference condition

The *Lithothamnion corallioides* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Lithothamnion corallioides* to reference condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Lithothamnion corallioides* in the biogeographic region are recovered such that the species makes its contribution to the network.

Lithothamnion corallioides is sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Introduction or spread of non-indigenous species & translocations (competition)	H	L
Organic enrichment	H	L
Physical change (to another seabed type)	H	M
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	L
Removal of target species (lethal)	H	L
Salinity changes - local	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	M-H
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M-H
Surface abrasion: damage to seabed surface features	H	L
Temperature changes - local	H	L
Water clarity changes	H	L
Atmospheric climate change	M	L
Temperature changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Phymatolithon calcareum: Recover to reference condition

The *Phymatolithon calcareum* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Phymatolithon calcareum* to reference condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Phymatolithon calcareum* in the biogeographic region are recovered such that the species makes its contribution to the network.

Phymatolithon calcareum is sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Introduction or spread of non-indigenous species & translocations (competition)	H	L
Organic enrichment	H	L
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	H
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	L
Removal of target species (lethal)	H	L
Salinity changes - local	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	M
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M-H
Surface abrasion: damage to seabed surface features	H	L
Temperature changes - local	H	L
Water clarity changes	H	L
Atmospheric climate change	M	L
Temperature changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Alkmaria romijni: Maintain in favourable condition

The *Alkmaria romijni* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Alkmaria romijni* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes

representative of *Alkmaria romijni* in the biogeographic region are maintained such that the species makes its contribution to the network.

Alkmaria romijni is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	M
Physical loss (to land or freshwater habitat)	H	H
Physical removal (extraction of substratum)	H	L
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Water flow (tidal current) changes - local	H	L
Wave exposure changes - local	H	L
Wave exposure changes - regional/national	H	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Water clarity changes	M	L
Removal of non-target species (lethal)	L	L
Salinity changes - local	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Gobius cobitis: Maintain in favourable condition

Within the context of the national MCZ project area, *Gobius cobitis* is unique to the south-west region and therefore must be represented in the network in order to meet the ENG principle of representativity. Subject to natural change, maintain the *Gobius cobitis* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Gobius cobitis* in the biogeographic region are maintained such that the species makes its contribution to the network.

Gobius cobitis is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Atmospheric climate change	M	L
Death or injury by collision	M	L
Physical removal (extraction of substratum)	M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Underwater noise	M	L
Barrier to species movement (behaviour, reproduction)	L	L
Salinity changes - local	L	L
Siltation rate changes (high)	L	L
Siltation rate changes (low)	L	L
Temperature changes - local	L	M
Water clarity changes	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Gobius couchi : Maintain in favourable condition

Within the context of the national MCZ project area, *Gobius couchi* is unique to the south-west region and therefore must be represented in the network in order to meet the ENG principle of representativity. Subject to natural change, maintain the *Gobius couchi* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Gobius couchi* in the biogeographic region are maintained such that the species makes its contribution to the network.

Gobius couchi is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Removal of non-target species (lethal)	H	L
Atmospheric climate change	M	L
Death or injury by collision	M	L
Physical removal (extraction of substratum)	M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Underwater noise	M	L
Barrier to species movement (behaviour, reproduction)	L	L
Salinity changes - local	L	L
Siltation rate changes (high)	L	L
Siltation rate changes (low)	L	L
Temperature changes - local	L	M
Water clarity changes	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Hippocampus guttulatus: Maintain in favourable condition

The *Hippocampus guttulatus* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Hippocampus guttulatus* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Hippocampus guttulatus* in the biogeographic region are maintained such that the species makes its contribution to the network.

Hippocampus guttulatus is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Death or injury by collision	H	L
Physical loss (to land or freshwater habitat)	H	L
Removal of non-target species (lethal)	H	H
Barrier to species movement (behaviour, reproduction)	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Physical removal (extraction of substratum)	M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - local	M	L
Temperature changes - regional/national	M	L
Underwater noise	M	L
Water flow (tidal & ocean current) changes - regional/national	M	L
Water flow (tidal current) changes - local	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Hippocampus hippocampus: Maintain in favourable condition

The *Hippocampus hippocampus* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Hippocampus hippocampus* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Hippocampus hippocampus* in the biogeographic region are maintained such that the species makes its contribution to the network.

Hippocampus hippocampus is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Death or injury by collision	H	L
Physical loss (to land or freshwater habitat)	H	L
Removal of non-target species (lethal)	H	H
Barrier to species movement (behaviour, reproduction)	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Physical removal (extraction of substratum)	M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - local	M	L
Temperature changes - regional/national	M	L
Underwater noise	M	L
Water flow (tidal & ocean current) changes - regional/national	M	L
Water flow (tidal current) changes - local	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Hippocampus hippocampus: Recover to favourable condition

The *Hippocampus hippocampus* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Hippocampus hippocampus* to favourable condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Hippocampus hippocampus* in the biogeographic region are recovered such that the species makes its contribution to the network.

Hippocampus hippocampus is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Death or injury by collision	H	L
Physical loss (to land or freshwater habitat)	H	L
Removal of non-target species (lethal)	H	H
Barrier to species movement (behaviour, reproduction)	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Physical removal (extraction of substratum)	M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Surface abrasion: damage to seabed surface features	M	L
Temperature changes - local	M	L
Temperature changes - regional/national	M	L
Underwater noise	M	L
Water flow (tidal & ocean current) changes - regional/national	M	L
Water flow (tidal current) changes - local	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Victorella pavida: Recover to reference condition

Within the context of the national MCZ project area, *Victorella pavida* is unique to the south-west region and therefore must be represented in the network in order to meet the ENG principle of representativity. Subject to natural change, recover the *Victorella pavida* to reference condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Victorella pavida* in the biogeographic region are recovered such that the species makes its contribution to the network.

Victorella pavida is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	H
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	L
Siltation rate changes (high)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Surface abrasion: damage to seabed surface features	H	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Siltation rate changes (low)	M	L
Removal of non-target species (lethal)	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices*

Amphianthus dohrnii: Maintain in favourable condition

The *Amphianthus dohrnii* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Amphianthus dohrnii* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes

representative of *Amphianthus dohrnii* in the biogeographic region are maintained such that the species makes its contribution to the network.

Amphianthus dohrnii is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	M
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	H	M
Siltation rate changes (high)	H	M
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M
Surface abrasion: damage to seabed surface features	H	M
Temperature changes - local	H	L
Temperature changes - regional/national	H	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Salinity changes - local	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Amphianthus dohrnii : Recover to reference condition

The *Amphianthus dohrnii* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Amphianthus dohrnii* to reference condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes

representative of *Amphianthus dohrnii* in the biogeographic region are recovered such that the species makes its contribution to the network.

Amphianthus dohrnii is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	M
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	H	M
Siltation rate changes (high)	H	M
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M
Surface abrasion: damage to seabed surface features	H	M
Temperature changes - local	H	L
Temperature changes - regional/national	H	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Salinity changes - local	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Eunicella verrucosa: Maintain in favourable condition

The *Eunicella verrucosa* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Eunicella verrucosa* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes

representative of *Eunicella verrucosa* in the biogeographic region are maintained such that the species makes its contribution to the network.

Eunicella verrucosa is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	M
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	M
Siltation rate changes (high)	H	M
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M
Surface abrasion: damage to seabed surface features	H	M
Water clarity changes	H	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Eunicella verrucosa: Recover to favourable condition

The *Eunicella verrucosa* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Eunicella verrucosa* to favourable condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes

representative of *Eunicella verrucosa* in the biogeographic region are recovered such that the species makes its contribution to the network.

Eunicella verrucosa is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	M
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	M
Siltation rate changes (high)	H	M
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M
Surface abrasion: damage to seabed surface features	H	M
Water clarity changes	H	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Eunicella verrucosa: Recover to reference condition

The *Eunicella verrucosa* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Eunicella verrucosa* to reference condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes

representative of *Eunicella verrucosa* in the biogeographic region are recovered such that the species makes its contribution to the network.

Eunicella verrucosa is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	M
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	H	M
Siltation rate changes (high)	H	M
Siltation rate changes (low)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M
Surface abrasion: damage to seabed surface features	H	M
Water clarity changes	H	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Haliclystus auricula: Maintain in favourable condition

The *Haliclystus auricula* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Haliclystus auricula* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Haliclystus auricula* in the biogeographic region are maintained such that the species makes its contribution to the network.

Haliclystus auricula is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes (sea level) - regional/national	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Removal of non-target species (lethal)	H	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Surface abrasion: damage to seabed surface features	H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Temperature changes - regional/national	M	L
Water clarity changes	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Temperature changes - local	L	L
Water flow (tidal & ocean current) changes - regional/national	L	L
Water flow (tidal current) changes - local	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Haliclystus auricula: Recover to reference condition

The *Haliclystus auricula* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Haliclystus auricula* to reference condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Haliclystus auricula* in the biogeographic region are recovered such that the species makes its contribution to the network.

Haliclystus auricula is sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes (sea level) - regional/national	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Removal of non-target species (lethal)	H	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Surface abrasion: damage to seabed surface features	H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Temperature changes - regional/national	M	L
Water clarity changes	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Temperature changes - local	L	L
Water flow (tidal & ocean current) changes - regional/national	L	L
Water flow (tidal current) changes - local	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Leptopsammia pruvoti: Maintain in favourable condition

The *Leptopsammia pruvoti* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Leptopsammia pruvoti* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Leptopsammia pruvoti* in the biogeographic region are maintained such that the species makes its contribution to the network.

Leptopsammia pruvoti is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	M
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	M
Salinity changes - local	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	M
Siltation rate changes (high)	H	M
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M
Surface abrasion: damage to seabed surface features	H	M
Temperature changes - local	H	M
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Siltation rate changes (low)	M	M

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Leptopsammia pruvoti: Recover to reference condition

The *Leptopsammia pruvoti* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Leptopsammia pruvoti* to reference condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Leptopsammia pruvoti* in the biogeographic region are recovered such that the species makes its contribution to the network.

Leptopsammia pruvoti is sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	M
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	M
Salinity changes - local	H	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	M
Siltation rate changes (high)	H	M
Structural abrasion/penetration: Structural damage to seabed >25mm	H	M
Surface abrasion: damage to seabed surface features	H	M
Temperature changes - local	H	M
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Siltation rate changes (low)	M	M

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Lucernariopsis campanulata: Maintain in favourable condition

The *Lucernariopsis campanulata* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Lucernariopsis campanulata* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Lucernariopsis campanulata* in the biogeographic region are maintained such that the species makes its contribution to the network.

Lucernariopsis campanulata is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes (sea level) - regional/national	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	L
Removal of non-target species (lethal)	H	H
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	L
Surface abrasion: damage to seabed surface features	H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Temperature changes - regional/national	M	L
Water clarity changes	M	L
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Temperature changes - local	L	L
Water flow (tidal & ocean current) changes - regional/national	L	L
Water flow (tidal current) changes - local	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Lucernariopsis cruxmelitensis: Maintain in favourable condition

The *Lucernariopsis cruxmelitensis* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Lucernariopsis cruxmelitensis* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Lucernariopsis cruxmelitensis* in the biogeographic region are maintained such that the species makes its contribution to the network.

Lucernariopsis cruxmelitensis is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Physical removal (extraction of substratum)	M	L
Siltation rate changes (high)	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Temperature changes - regional/national	M	L
Emergence regime changes - local	L	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	L	L
Surface abrasion: damage to seabed surface features	L	L
Temperature changes - local	L	L
Water clarity changes	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Lucernariopsis cruxmelitensis: Recover to favourable condition

The *Lucernariopsis cruxmelitensis* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Lucernariopsis cruxmelitensis* to favourable condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Lucernariopsis cruxmelitensis* in the biogeographic region are recovered such that the species makes its contribution to the network.

Lucernariopsis cruxmelitensis is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical change (to another seabed type)	M	L
Physical removal (extraction of substratum)	M	L
Siltation rate changes (high)	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	L
Temperature changes - regional/national	M	L
Emergence regime changes - local	L	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	L	L
Surface abrasion: damage to seabed surface features	L	L
Temperature changes - local	L	L
Water clarity changes	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Palinurus elephas: Maintain in favourable condition

The *Palinurus elephas* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Palinurus elephas* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Palinurus elephas* in the biogeographic region are maintained such that the species makes its contribution to the network.

Palinurus elephas is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Genetic modification & translocation of indigenous species	H	L
Physical change (to another seabed type)	H	H
Physical loss (to land or freshwater habitat)	H	M
Physical removal (extraction of substratum)	H	H
Removal of target species (lethal)	H	M
Salinity changes - local	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	H
Structural abrasion/penetration: Structural damage to seabed >25mm	H	H
Organic enrichment	M	L
Siltation rate changes (high)	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Palinurus elephas: Recover to favourable condition

The *Palinurus elephas* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Palinurus elephas* to favourable condition by 2020, and maintain thereafter,
such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Palinurus elephas* in the biogeographic region are recovered such that the species makes its contribution to the network.

Palinurus elephas is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Genetic modification & translocation of indigenous species	H	L
Physical change (to another seabed type)	H	H
Physical loss (to land or freshwater habitat)	H	M
Physical removal (extraction of substratum)	H	H
Removal of target species (lethal)	H	M
Salinity changes - local	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	H
Structural abrasion/penetration: Structural damage to seabed >25mm	H	H
Organic enrichment	M	L
Siltation rate changes (high)	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Palinurus elephas: Recover to reference condition

The *Palinurus elephas* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Palinurus elephas* to reference condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Palinurus elephas* in the biogeographic region are recovered such that the species makes its contribution to the network.

Palinurus elephas is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Genetic modification & translocation of indigenous species	H	L
Physical change (to another seabed type)	H	H
Physical loss (to land or freshwater habitat)	H	M
Physical removal (extraction of substratum)	H	H
Removal of target species (lethal)	H	M
Salinity changes - local	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	H	H
Structural abrasion/penetration: Structural damage to seabed >25mm	H	H
Organic enrichment	M	L
Siltation rate changes (high)	M	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Arctica islandica: Maintain in favourable condition

The *Arctica islandica* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Arctica islandica* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes

representative of *Arctica islandica* in the biogeographic region are maintained such that the species makes its contribution to the network.

Arctica islandica is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical change (to another seabed type)	H	L
Physical loss (to land or freshwater habitat)	H	L
Physical removal (extraction of substratum)	H	M
Removal of non-target species (lethal)	H	L
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	H	H
Siltation rate changes (high)	H	L
Structural abrasion/penetration: Structural damage to seabed >25mm	H	H
Temperature changes - local	H	L
Wave exposure changes - local	M	L
Water flow (tidal & ocean current) changes - regional/national	L	L
Water flow (tidal current) changes - local	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Ostrea edulis: Maintain in favourable condition

The *Ostrea edulis* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Ostrea edulis* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Ostrea edulis* in the biogeographic region are maintained such that the species makes its contribution to the network.

Ostrea edulis is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Introduction of microbial pathogens (disease)	H	M
Introduction or spread of non-indigenous species & translocations (competition)	H	L-M
Physical change (to another seabed type)	H	H
Physical loss (to land or freshwater habitat)	H	L
Removal of target species (lethal)	H	H
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Temperature changes - local	H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Physical removal (extraction of substratum)	M	M
Shallow abrasion/penetration: damage to seabed surface and penetration		
≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	M
Surface abrasion: damage to seabed surface features	M	L-M
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Salinity changes - local	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Ostrea edulis: Recover to favourable condition

The *Ostrea edulis* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Ostrea edulis* to favourable condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Ostrea edulis* in the biogeographic region are recovered such that the species makes its contribution to the network.

Ostrea edulis is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Introduction of microbial pathogens (disease)	H	M
Introduction or spread of non-indigenous species & translocations (competition)	H	L-M
Physical change (to another seabed type)	H	H
Physical loss (to land or freshwater habitat)	H	L
Removal of target species (lethal)	H	H
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Temperature changes - local	H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Physical removal (extraction of substratum)	M	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	M
Surface abrasion: damage to seabed surface features	M	L-M
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Salinity changes - local	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Ostrea edulis: Recover to reference condition

The *Ostrea edulis* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Ostrea edulis* to reference condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Ostrea edulis* in the biogeographic region are recovered such that the species makes its contribution to the network.

Ostrea edulis is sensitive to the pressures listed below.

	Sensitivity[+]	*Confidence*[+]
Introduction of microbial pathogens (disease)	H	M
Introduction or spread of non-indigenous species & translocations (competition)	H	L-M
Physical change (to another seabed type)	H	H
Physical loss (to land or freshwater habitat)	H	L
Removal of target species (lethal)	H	H
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Temperature changes - local	H	L
Atmospheric climate change	M	L
Emergence regime changes - local	M	L
Physical removal (extraction of substratum)	M	M
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	M	L
Structural abrasion/penetration: Structural damage to seabed >25mm	M	M
Surface abrasion: damage to seabed surface features	M	L-M
Wave exposure changes - local	M	L
Wave exposure changes - regional/national	M	L
Salinity changes - local	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Paludinella littorina: Maintain in favourable condition

The *Paludinella littorina* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain the *Paludinella littorina* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Paludinella littorina* in the biogeographic region are maintained such that the species makes its contribution to the network.

Paludinella littorina is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Physical loss (to land or freshwater habitat)	H	L
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Wave exposure changes - local	H	L
Wave exposure changes - regional/national	H	L
Atmospheric climate change	M	L
Temperature changes - local	M	L
Emergence regime changes - local	L	L
Salinity changes - local	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Tenellia adspersa : Recover to reference condition

The *Tenellia adspersa* FOCI is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, recover the *Tenellia adspersa* to reference condition by 2020, and maintain thereafter, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Tenellia adspersa* in the biogeographic region are recovered such that the species makes its contribution to the network.

Tenellia adspersa is sensitive to the pressures:

	Sensitivity[+]	*Confidence*[+]
Emergence regime changes - local	H	L
Physical loss (to land or freshwater habitat)	H	L
Siltation rate changes (high)	H	L
Siltation rate changes (low)	H	L
Atmospheric climate change	M	L
Introduction or spread of non-indigenous species & translocations (competition)	M	L
Physical removal (extraction of substratum)	M	L
Shallow abrasion/penetration: damage to seabed surface and penetration ≤25mm	L	L
Structural abrasion/penetration: Structural damage to seabed >25mm	L	L
Surface abrasion: damage to seabed surface features	L	L

Human activities which cause these pressures will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

[+] *Sensitivity and Confidence information extracted from national sensitivity matrices.*

Draft conservation objectives for geological and geomorphological features of importance

Haig Fras Rock Complex: maintain in favourable condition

The Haig Fras Rock Complex is listed in the ENG as a feature that should be represented in the network. Subject to natural change, maintain the Haig Fras Rock Complex in favourable condition, such that the:

- extent,
- component features,
- spatial distribution,
- integrity,
- size structure;
- natural environmental quality; and
- natural environmental processes

representative of the Haig Fras Rock Complex are maintained.

Human activities which causing pressures that this feature is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Celtic Sea Relict Sandbanks: maintain in favourable condition

The Celtic Sea Relict Sandbanks are listed in the ENG as a feature that should be represented in the network. Subject to natural change, maintain the Celtic Sea Relict Sandbanks in favourable condition, such that the:

- extent,
- component features,
- spatial distribution,
- integrity,
- size structure;
- natural environmental quality; and
- natural environmental processes

representative of the Celtic Sea Relict Sandbanks are maintained.

Human activities which causing pressures that this feature is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Portland Deep: maintain in favourable condition

The Portland Deep is listed in the ENG as a feature that should be represented in the network. Subject to natural change, maintain the Portland Deep in favourable condition, such that the:

- extent,
- component features,
- spatial distribution,
- integrity,
- size structure;
- natural environmental quality; and
- natural environmental processes

representative of the Portland Deep are maintained.

Human activities which causing pressures that this feature is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Draft conservation objectives for mobile FOCI

Anguilla anguilla: maintain in / recover to favourable condition

Anguilla anguilla is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain *Anguilla anguilla* in / recover it to favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Anguilla anguilla* in the biogeographic region are

maintained / recovered, such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Osmerus eperlanus: maintain in / recover to favourable condition

Osmerus eperlanus is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain *Osmerus eperlanus* in / recover it to favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Osmerus eperlanus* in the biogeographic region are

maintained / recovered, such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Raja undulata: maintain in / recover to favourable condition

Raja undulata is listed in the ENG as a feature that has to be represented in the network. Subject to natural change, maintain *Raja undulata* in / recover it to favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Raja undulata* in the biogeographic region are

maintained / recovered, such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Draft conservation objectives for non-ENG listed mobile species

Gavia arctica: maintain in favourable condition

Gavia arctica is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Gavia arctica* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Gavia arctica* in the biogeographic region are

maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Gavia immer: maintain in favourable condition

Gavia immer is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Gavia immer* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Gavia immer* in the biogeographic region are

maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Podiceps cristatus: maintain in favourable condition

Podiceps cristatus is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Podiceps cristatus* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Podiceps cristatus* in the biogeographic region are

maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Podiceps nigricollis: maintain in favourable condition

Podiceps nigricollis is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Podiceps nigricollis* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Podiceps nigricollis* in the biogeographic region are

maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Podiceps grisegena: maintain in favourable condition

Podiceps grisegena is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Podiceps grisegena* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Podiceps grisegena* in the biogeographic region are

maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Podiceps auritus: maintain in favourable condition

Podiceps auritus is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Podiceps auritus* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Podiceps auritus* in the biogeographic region are

maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Uuria aalge: maintain in favourable condition

Uuria aalge is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Uuria aalge* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Uuria aalge* in the biogeographic region are maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Phocoena phocena: maintain in favourable condition

Phocena phocoena is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Phocoena phocoena* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Phocena phocoena* in the biogeographic region are
maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Cetorhinus maximus: maintain in favourable condition

Cetorhinus maximus is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Cetorhinus maximus* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Cetorhinus maximus* in the biogeographic region are

maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Tursiops truncatus: maintain in favourable condition

Tursiops truncatus is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Tursiops truncatus* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Tursiops truncatus* in the biogeographic region are

maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Fulmarus glacialis: maintain in favourable condition

Fulmarus glacialis is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Fulmarus glacialis* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Fulmarus glacialis* in the biogeographic region are

maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Fratercula arctica: maintain in favourable condition

Fratercula arctica is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Fratercula arctica* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Fratercula arctica* in the biogeographic region are

maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Alca torda: maintain in favourable condition

Alca torda is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Alca torda* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Alca torda* in the biogeographic region are maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Rissa tridactyla: maintain in favourable condition

Rissa tridactyla is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Rissa tridactyla* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Rissa tridactyla* in the biogeographic region are maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Puffinus puffinus: maintain in favourable condition

Puffinus puffinus is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Puffinus puffinus* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Puffinus puffinus* in the biogeographic region are

maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.

Halichoerus grypus: maintain in favourable condition

Halichoerus grypus is a mobile species, for which the recommended site is an area of importance. Subject to natural change, maintain *Halichoerus grypus* in favourable condition, such that the:

- natural range;
- habitat extent;
- population structure;
- population density;
- size structure;
- natural environmental quality; and
- natural environmental processes representative of *Halichoerus grypus* in the biogeographic region are

maintained , such that the species makes its contribution to the network.

Human activities which cause pressures that the species is sensitive to will need to be managed if they prevent the conservation objectives from being achieved to ensure the MCZ contributes to an ecologically coherent and well-managed network of Marine Protected Areas.