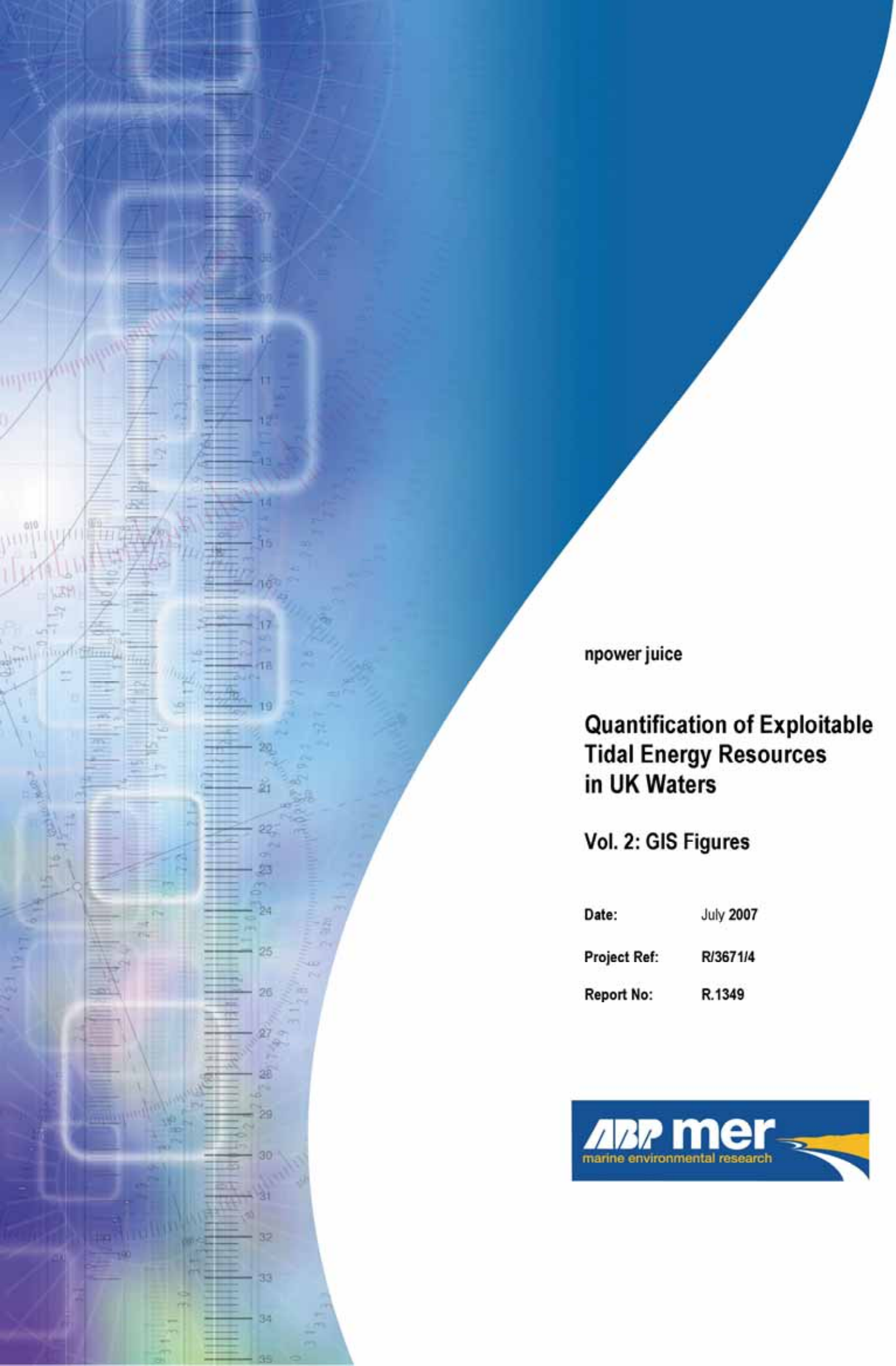

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Quantification of Exploitable Tidal Energy Resources in UK Waters

Vol. 2: GIS Figures

Date: July 2007

Project Ref: R/3671/4

Report No: R.1349

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Quantification of Exploitable Tidal Energy Resources in UK Waters

Date: July 2007

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Report No: R.1349

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Quantification of Exploitable Tidal Energy Resources in UK Waters – Volume 2: GIS Figures

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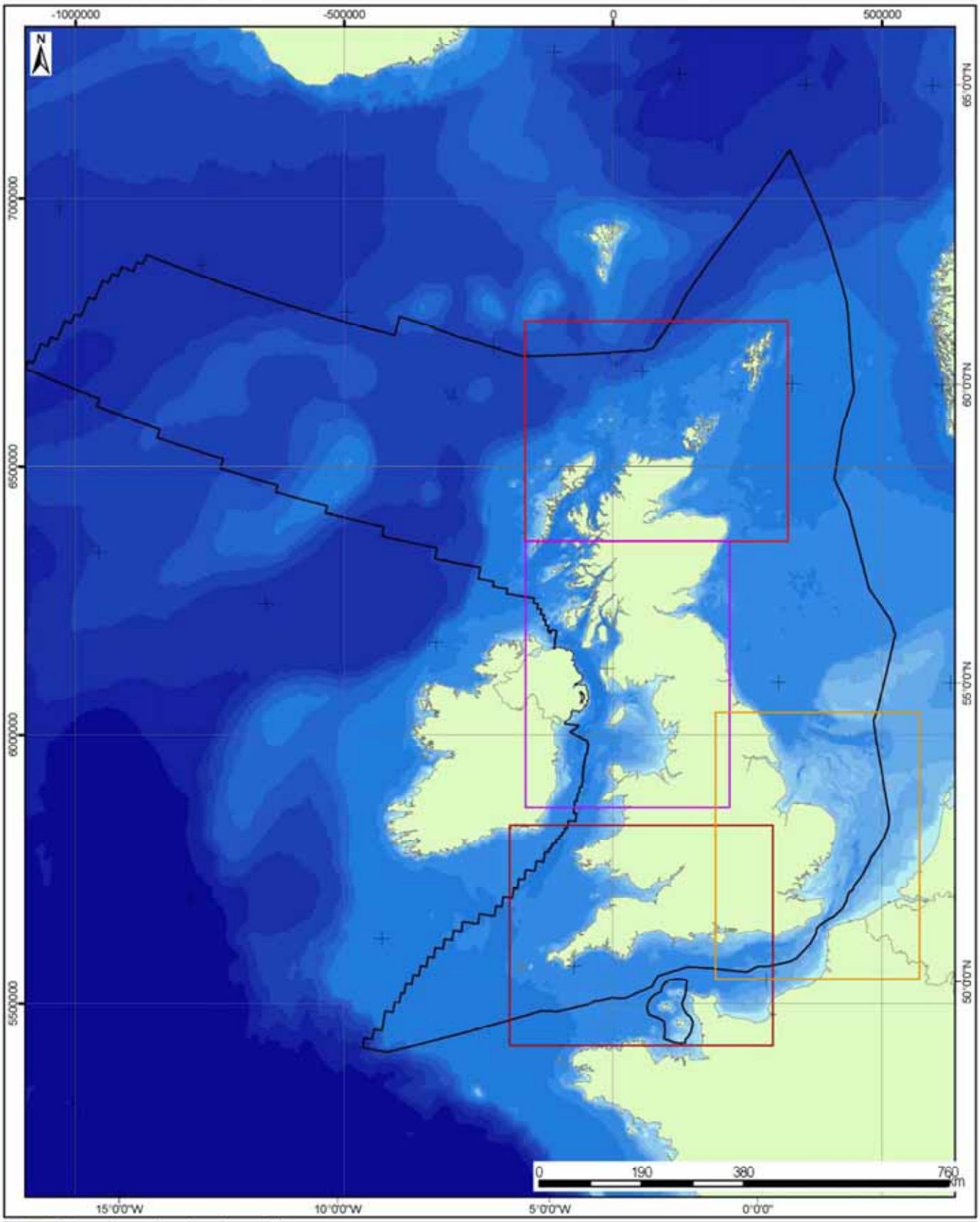

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Study Area

Land

Regional Sub-Areas

North East South West

Bathymetry (MSL)

<5 5 - 10 10 - 20 20 - 30 30 - 40 40 - 50 50 - 100 100 - 250 250 - 500 500 - 1000 1000 - 2000 2000 - 3000 3000 - 4000 >4000

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Study Area and Regional Sub-Areas

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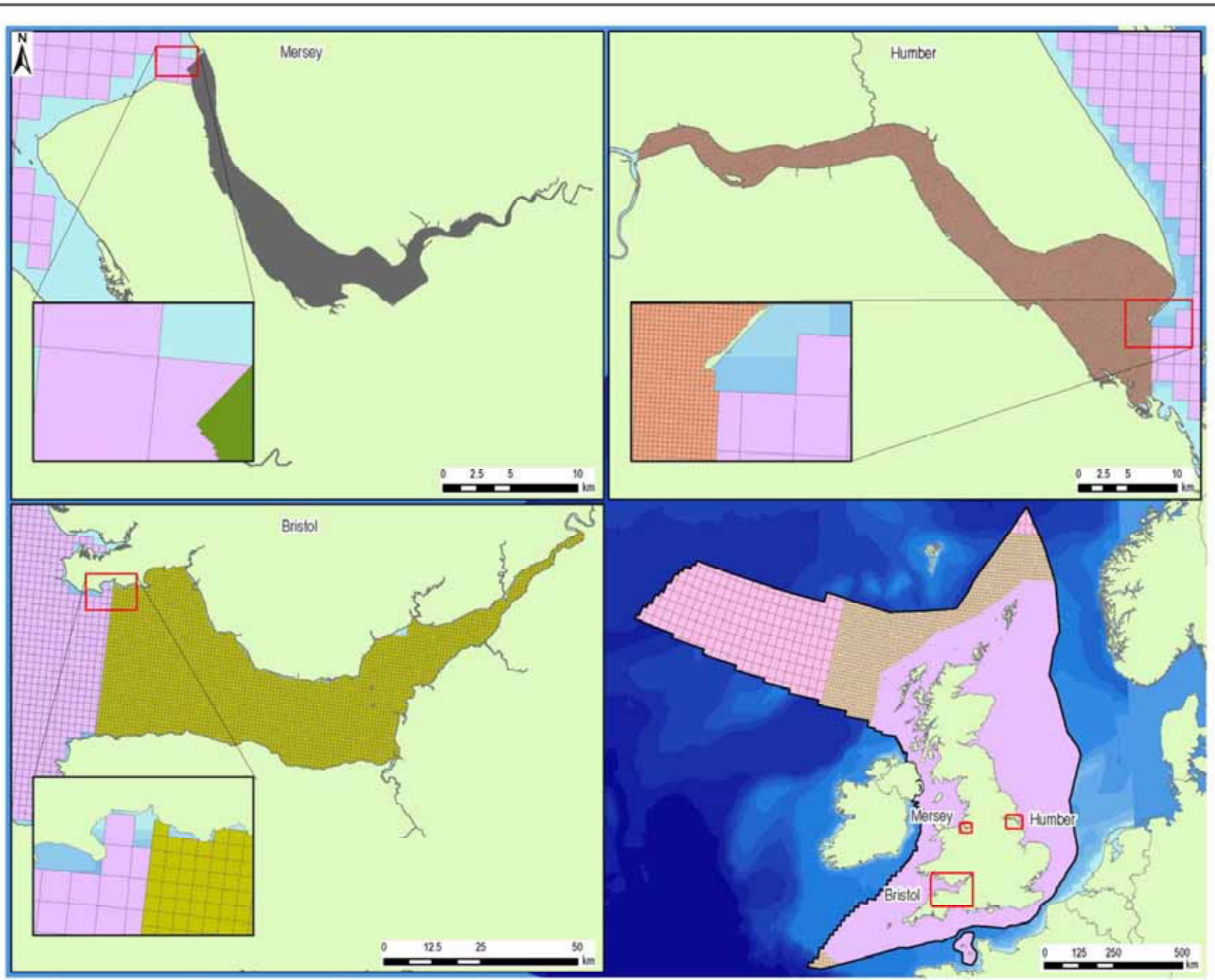

Land
Study Area

Model Scale

POL (~35 km)
POL (~12 km)
POL (~1.8 km)
ABPmer Humber (~150 m)
ABPmer Mersey (~40 m)
ABPmer Bristol (~900 m)

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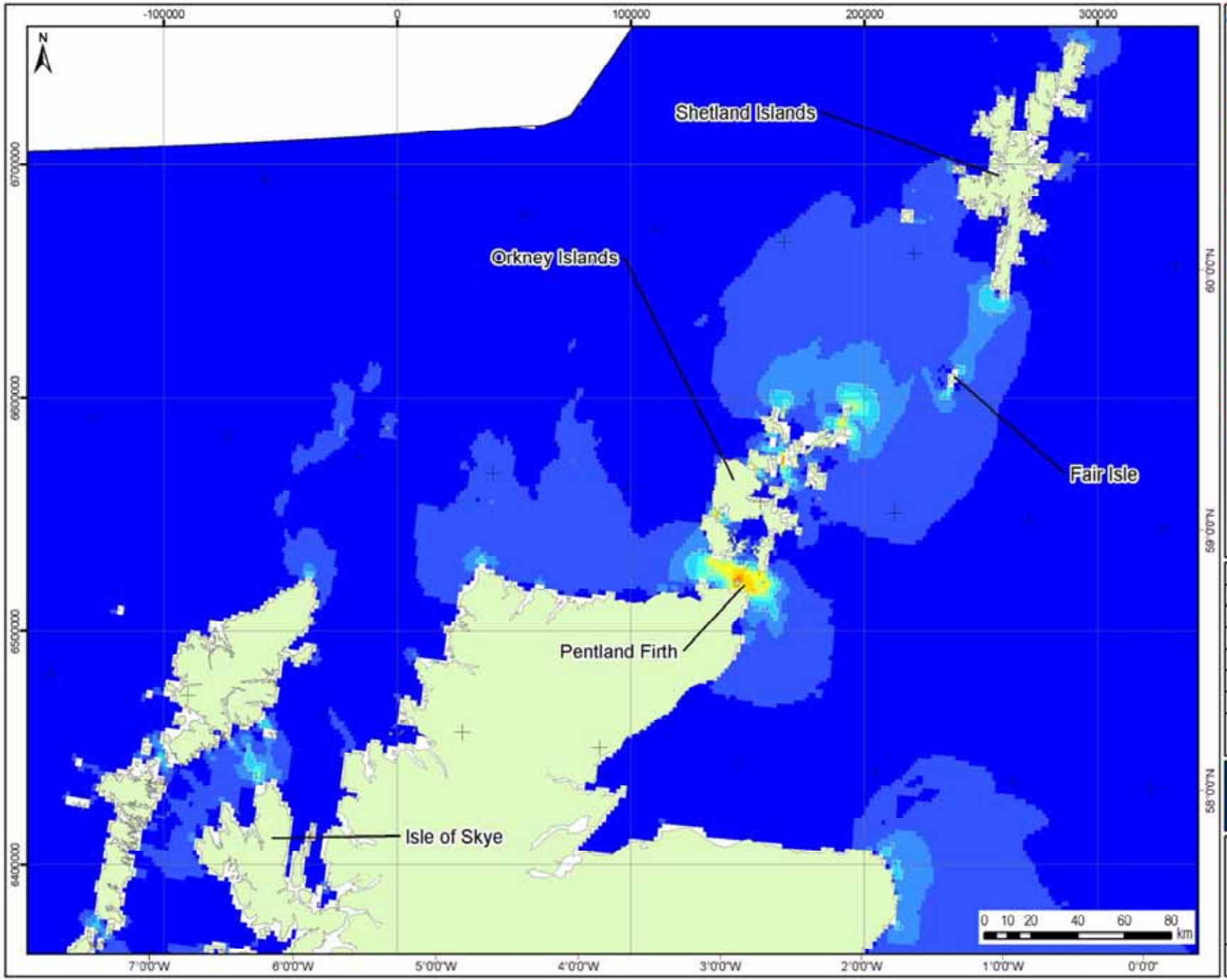
Tidal Model Scales

GIS Figure 2



AOI

Mean Spring Peak Current (m/s)

- 0.00 - 0.50
- 0.51 - 1.00
- 1.01 - 1.50
- 1.51 - 2.00
- 2.01 - 2.50
- 2.51 - 3.00
- 3.01 - 3.50
- 3.51 - 4.00
- 4.01 - 4.50
- 4.51 - 5.00
- 5.01 - 5.50
- 5.51 - 6.00

Date	By	Size	Version
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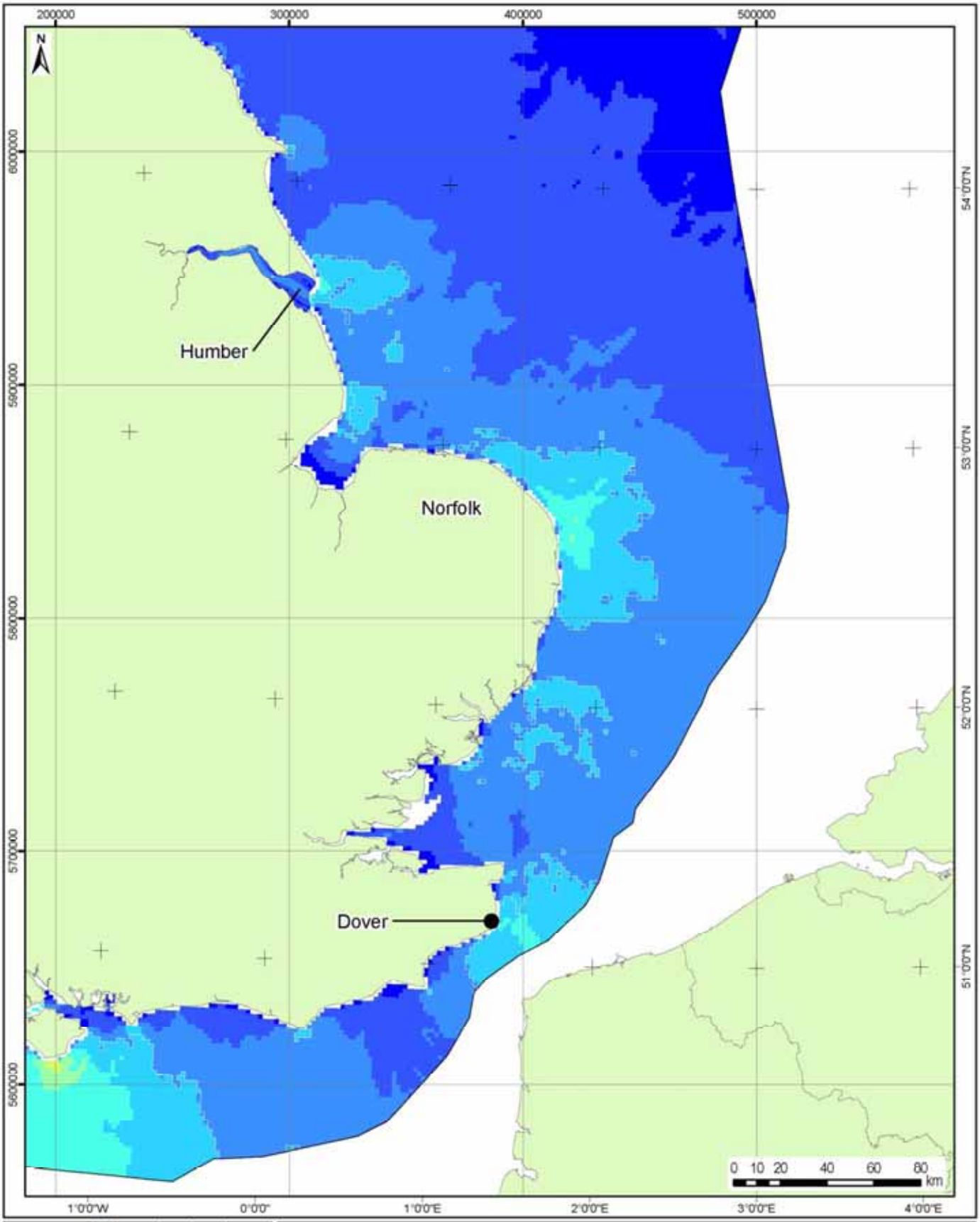
Peak Flow for a Mean Spring Tide - North

GIS Figure 3



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AOI

Mean Spring Peak Current (m/s)

0.00 - 0.50
0.51 - 1.00
1.01 - 1.50
1.51 - 2.00
2.01 - 2.50
2.51 - 3.00
3.01 - 3.50
3.51 - 4.00
4.01 - 4.50
4.51 - 5.00
5.01 - 5.50
5.51 - 6.00

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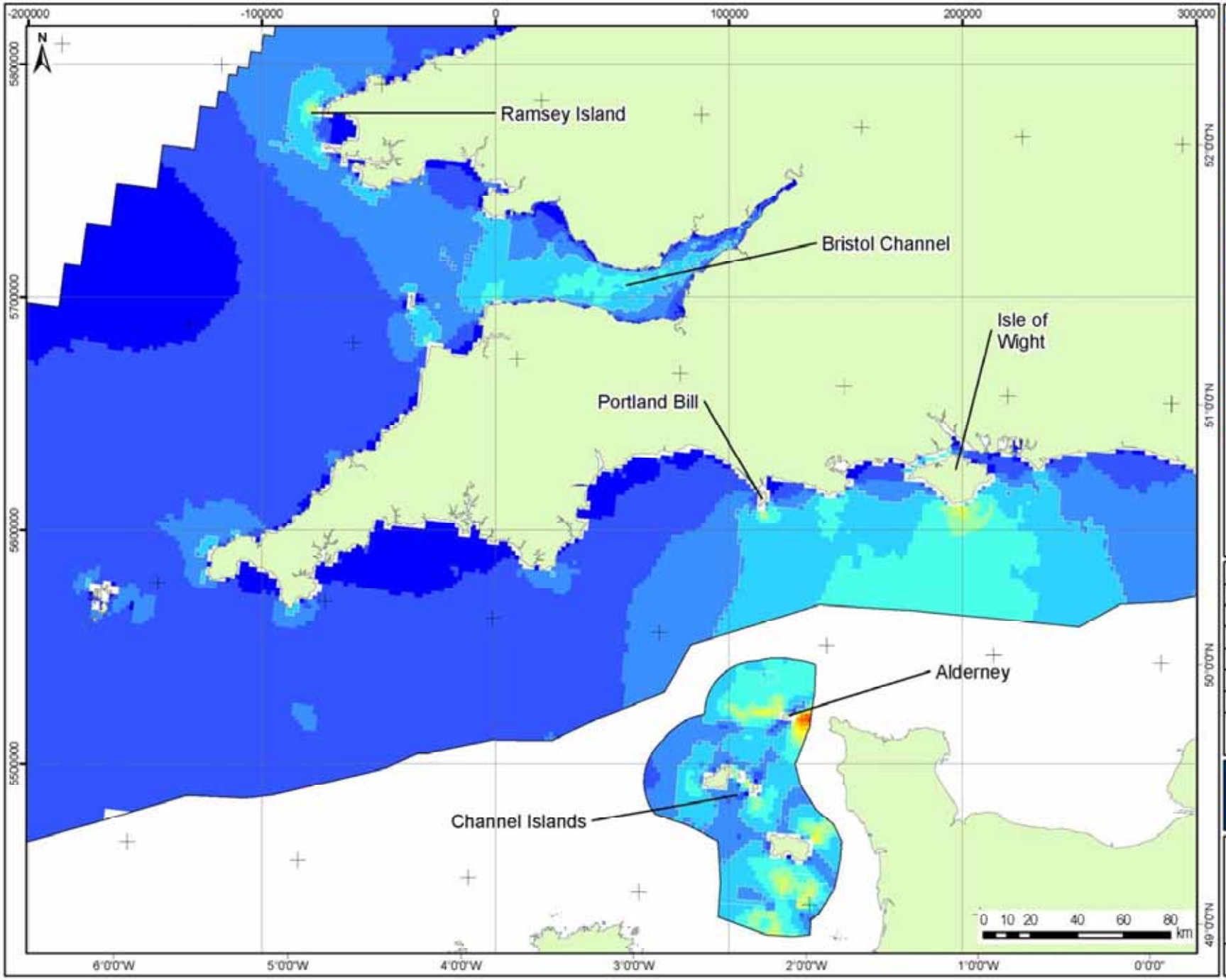
Peak Flow for a Mean Spring Tide - East

GIS Figure 4



AOI

Mean Spring Peak Current (m/s)

- 0.00 - 0.50
- 0.51 - 1.00
- 1.01 - 1.50
- 1.51 - 2.00
- 2.01 - 2.50
- 2.51 - 3.00
- 3.01 - 3.50
- 3.51 - 4.00
- 4.01 - 4.50
- 4.51 - 5.00
- 5.01 - 5.50
- 5.51 - 6.00

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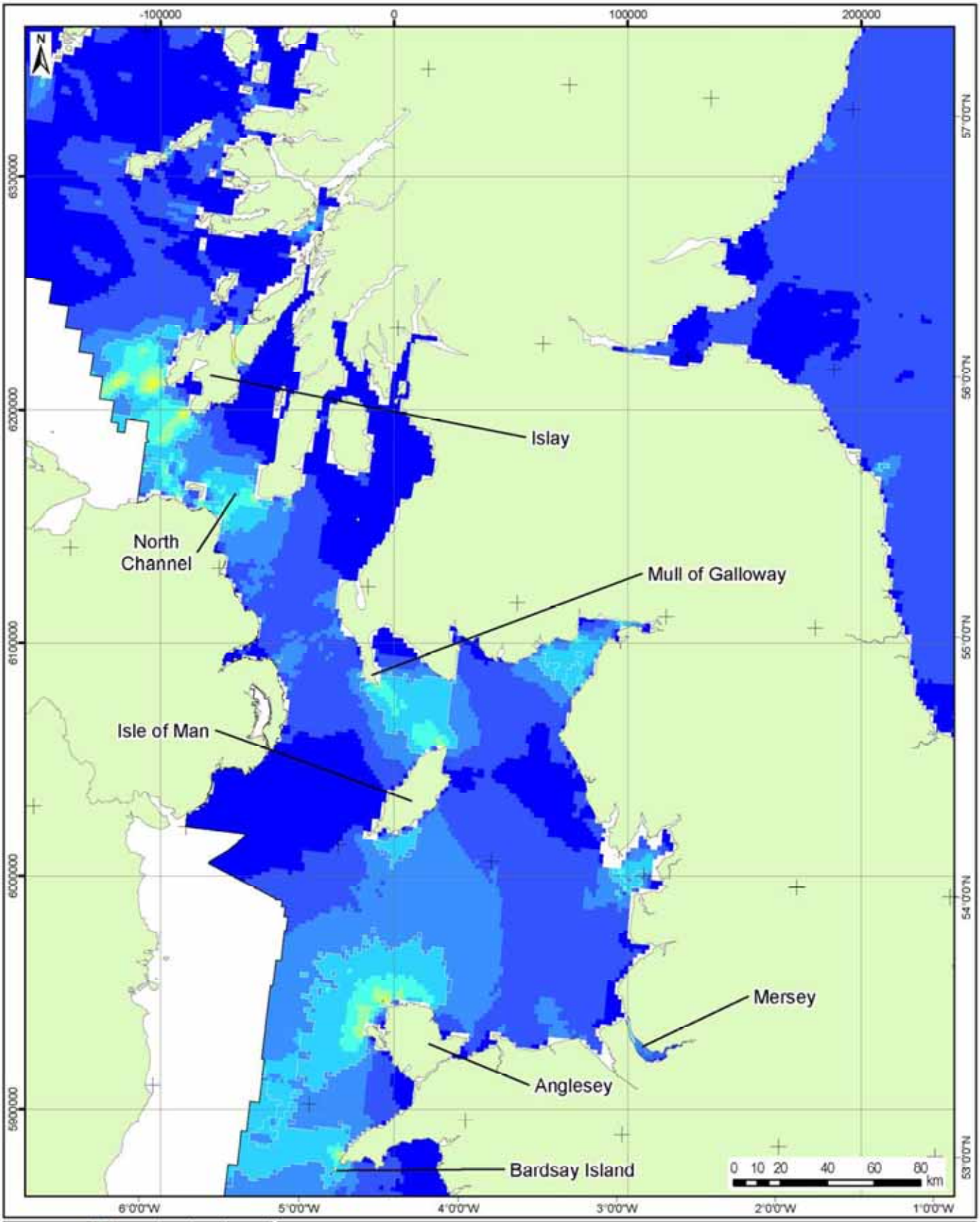
Peak Flow for a Mean Spring Tide - South

GIS Figure 5



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AOI

Mean Spring Peak Current (m/s)

0.00 - 0.50
0.51 - 1.00
1.01 - 1.50
1.51 - 2.00
2.01 - 2.50
2.51 - 3.00
3.01 - 3.50
3.51 - 4.00
4.01 - 4.50
4.51 - 5.00
5.01 - 5.50
5.51 - 6.00

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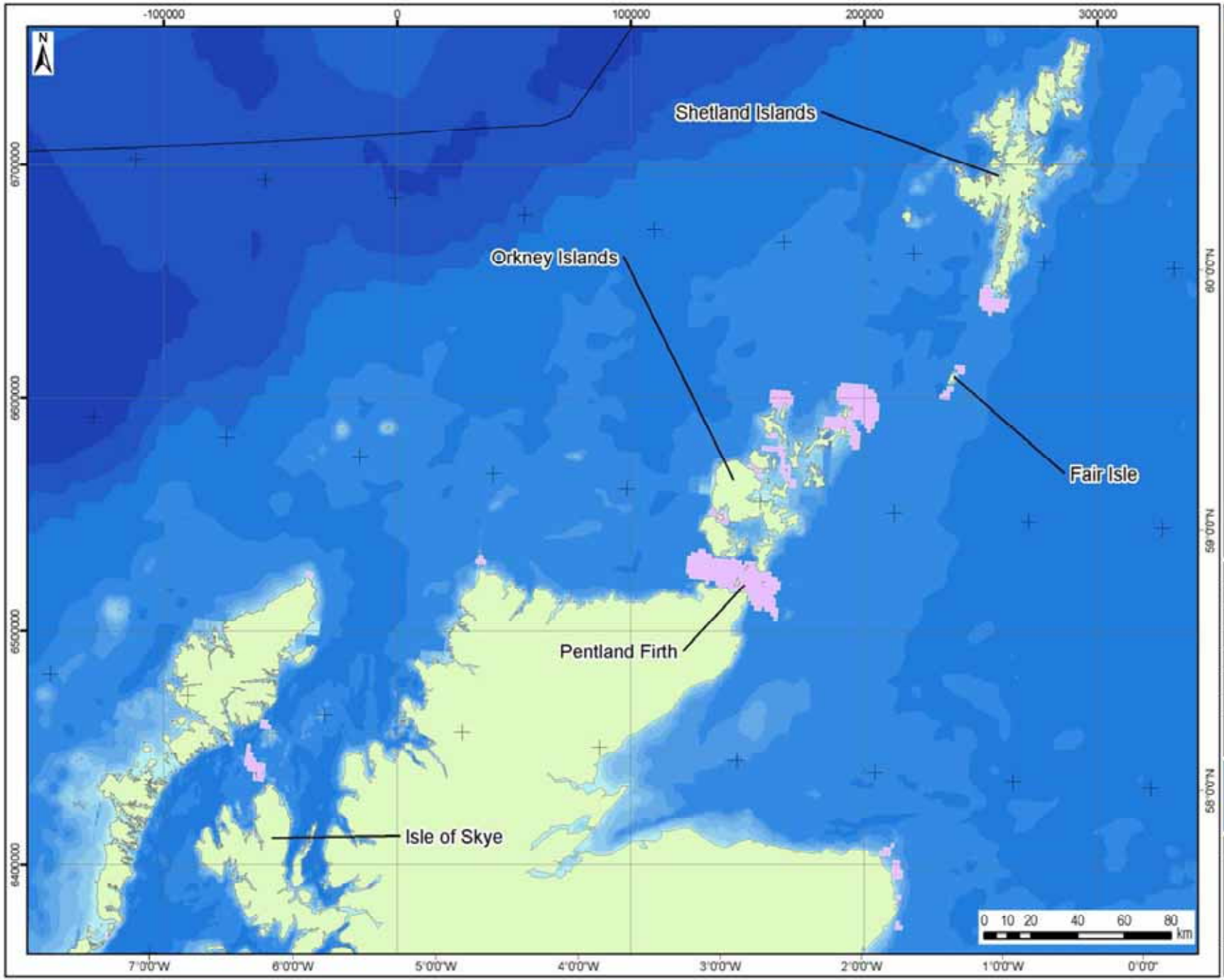
Peak Flow for a Mean Spring Tide - West

GIS Figure 6



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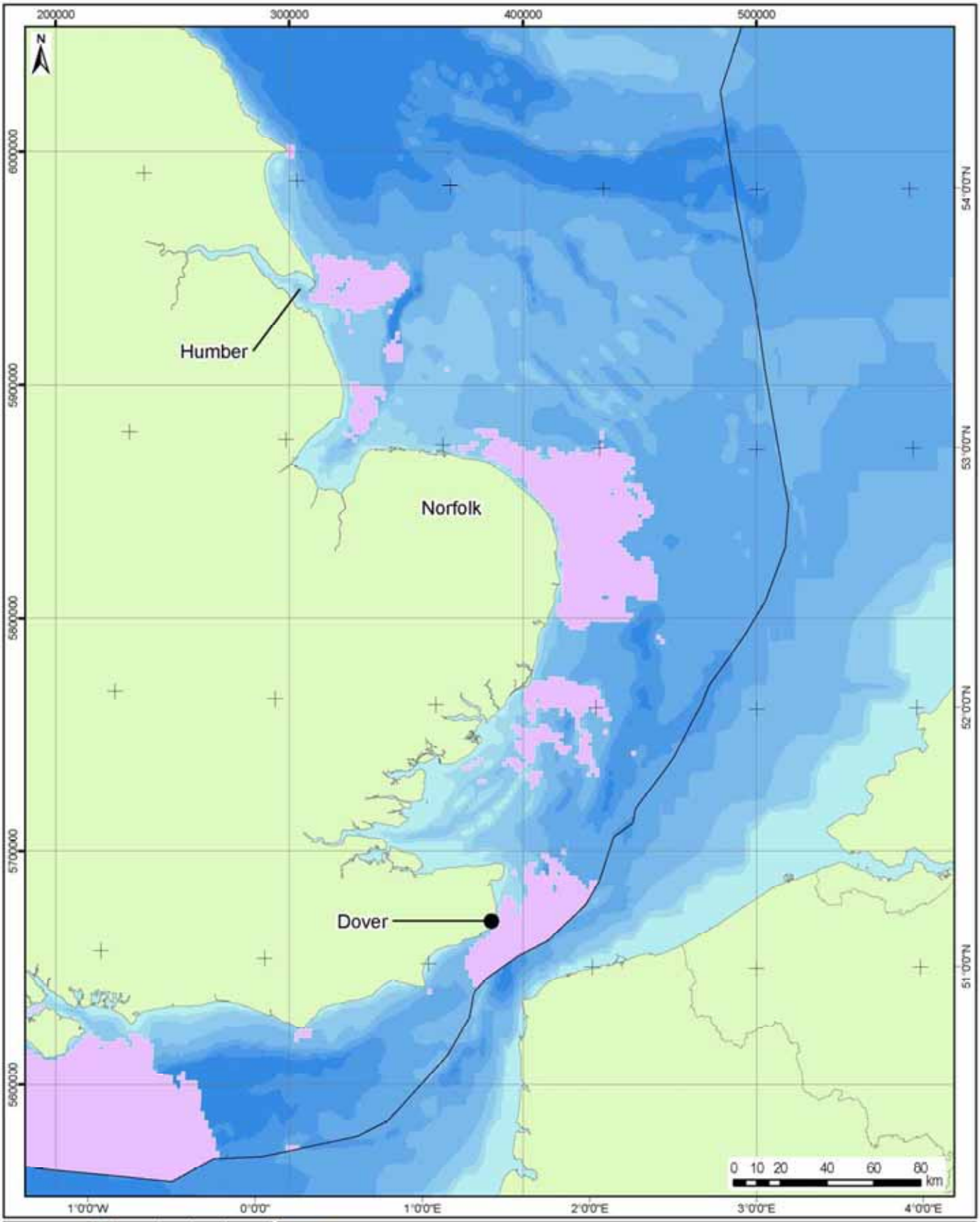
Area of Interest (AOI) Suitable for the Deployment of at Least 1 Tidal Technology Type - North

GIS Figure 7



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AOI

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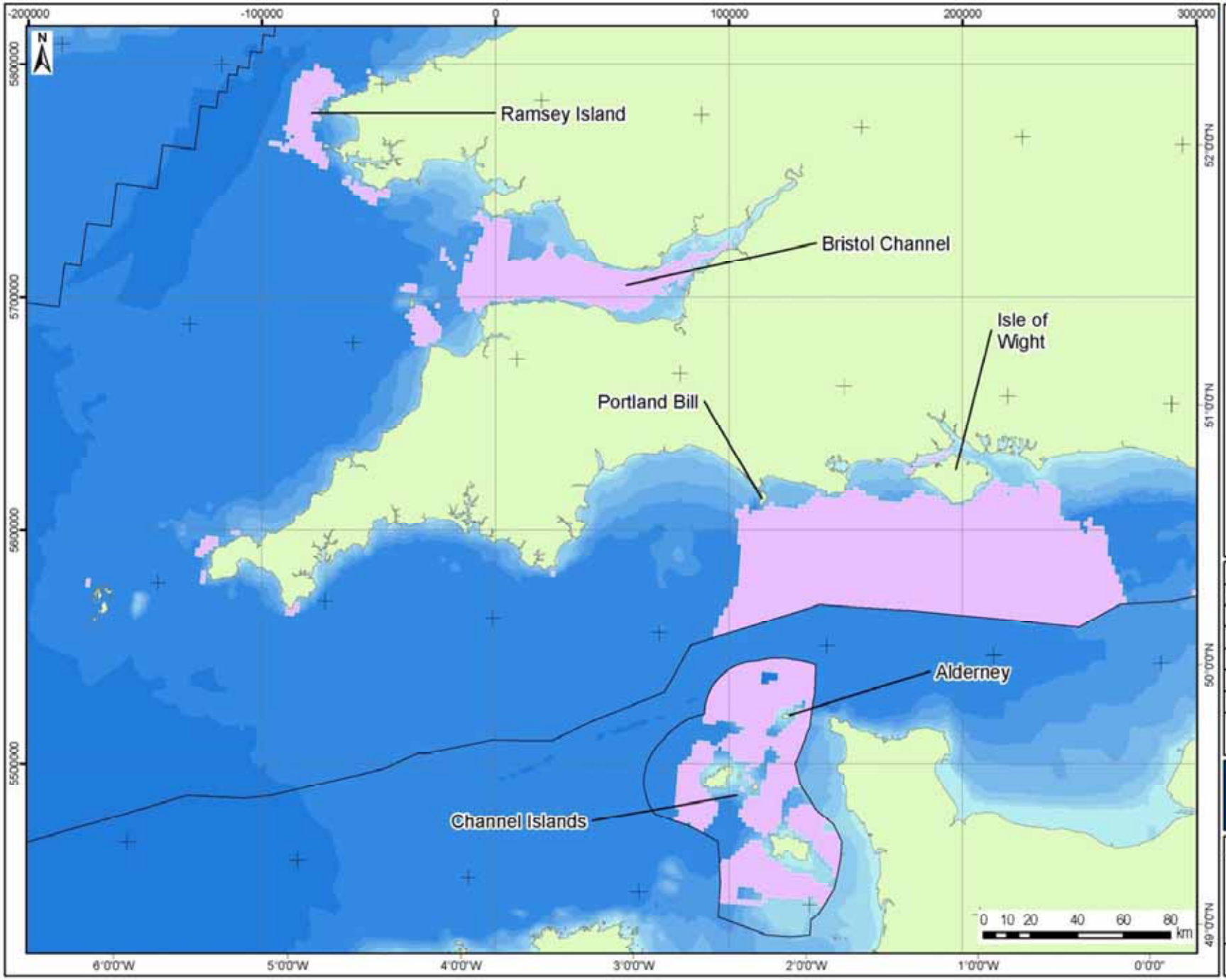
Area of Interest (AOI) Suitable for the Deployment of at Least 1 Tidal Technology Type - East

GIS Figure 8



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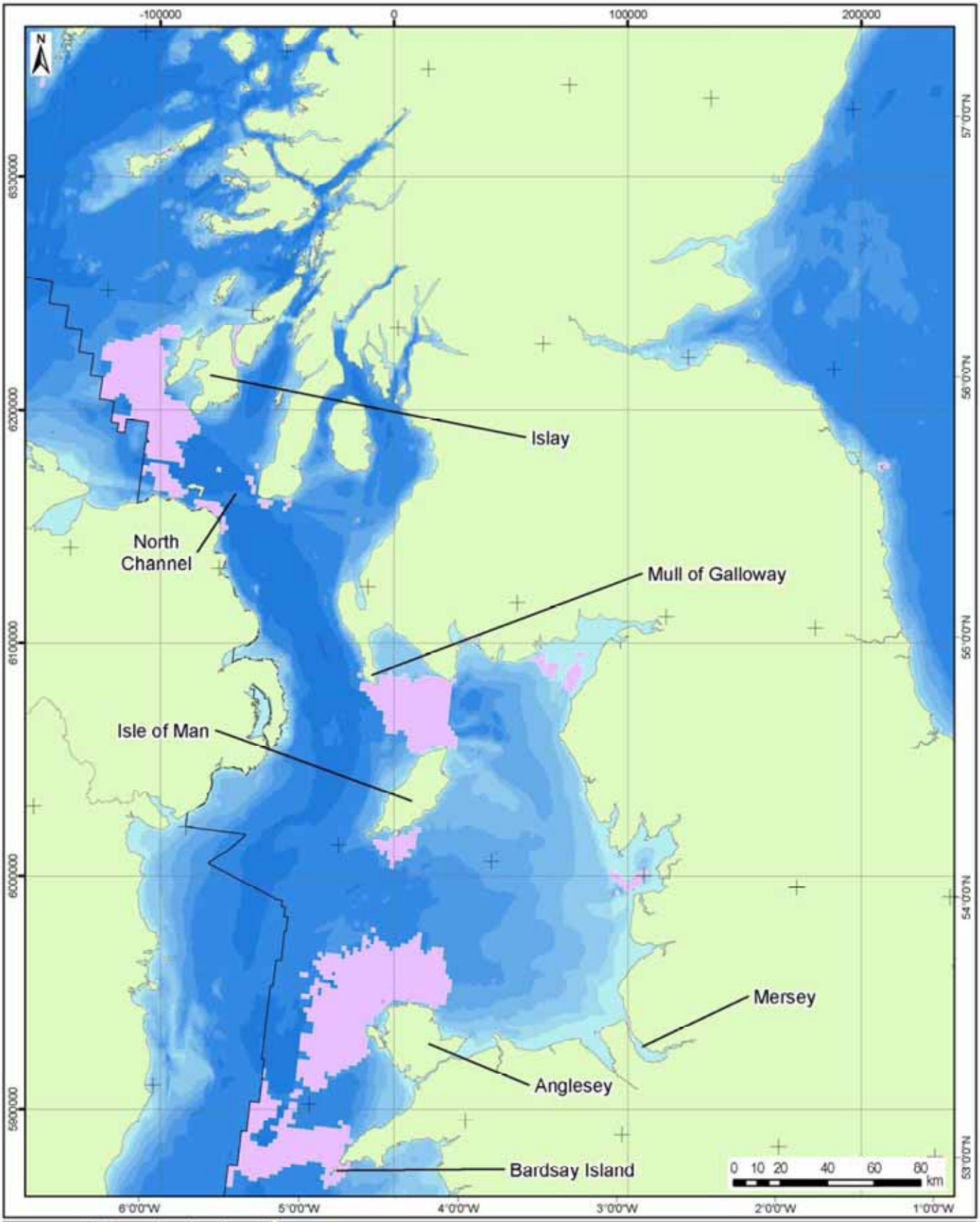
Area of Interest (AOI) Suitable for the Deployment of at Least 1 Tidal Technology Type - South

GIS Figure 9



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AOI

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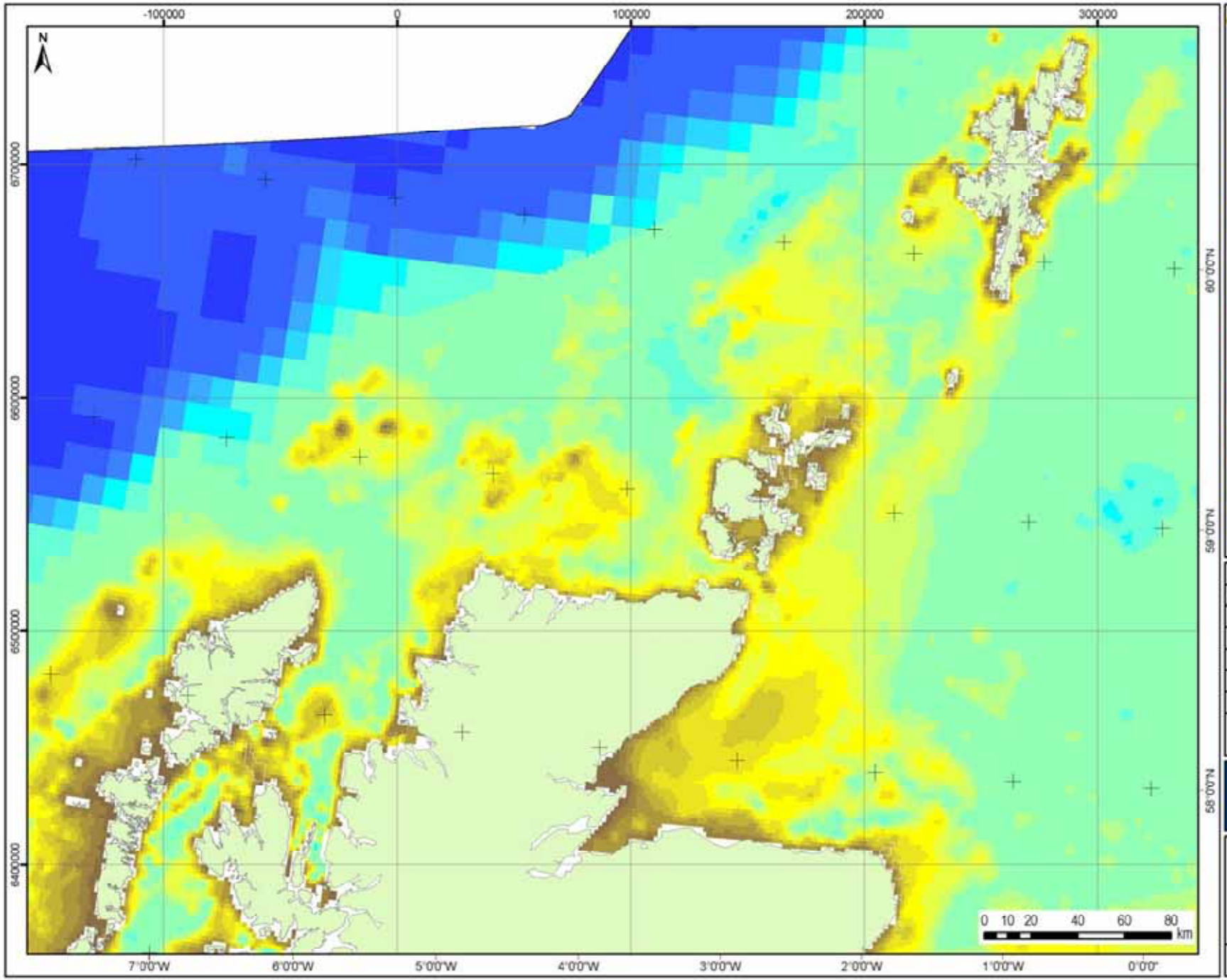
Area of Interest (AOI) Suitable for the Deployment of at Least 1 Tidal Technology Type - West

GIS Figure 10



AOI

Water Depth (m LAT)

- <10
- 10 - 20
- 20 - 30
- 30 - 40
- 40 - 50
- 50 - 60
- 60 - 70
- 70 - 80
- 80 - 90
- 90 - 100
- 100 - 150
- 150 - 200
- 200 - 250
- 250 - 300
- 300 - 400
- 400 - 500
- 500 - 1000
- 1000 - 2000
- >2000

Date	By	Size	Version
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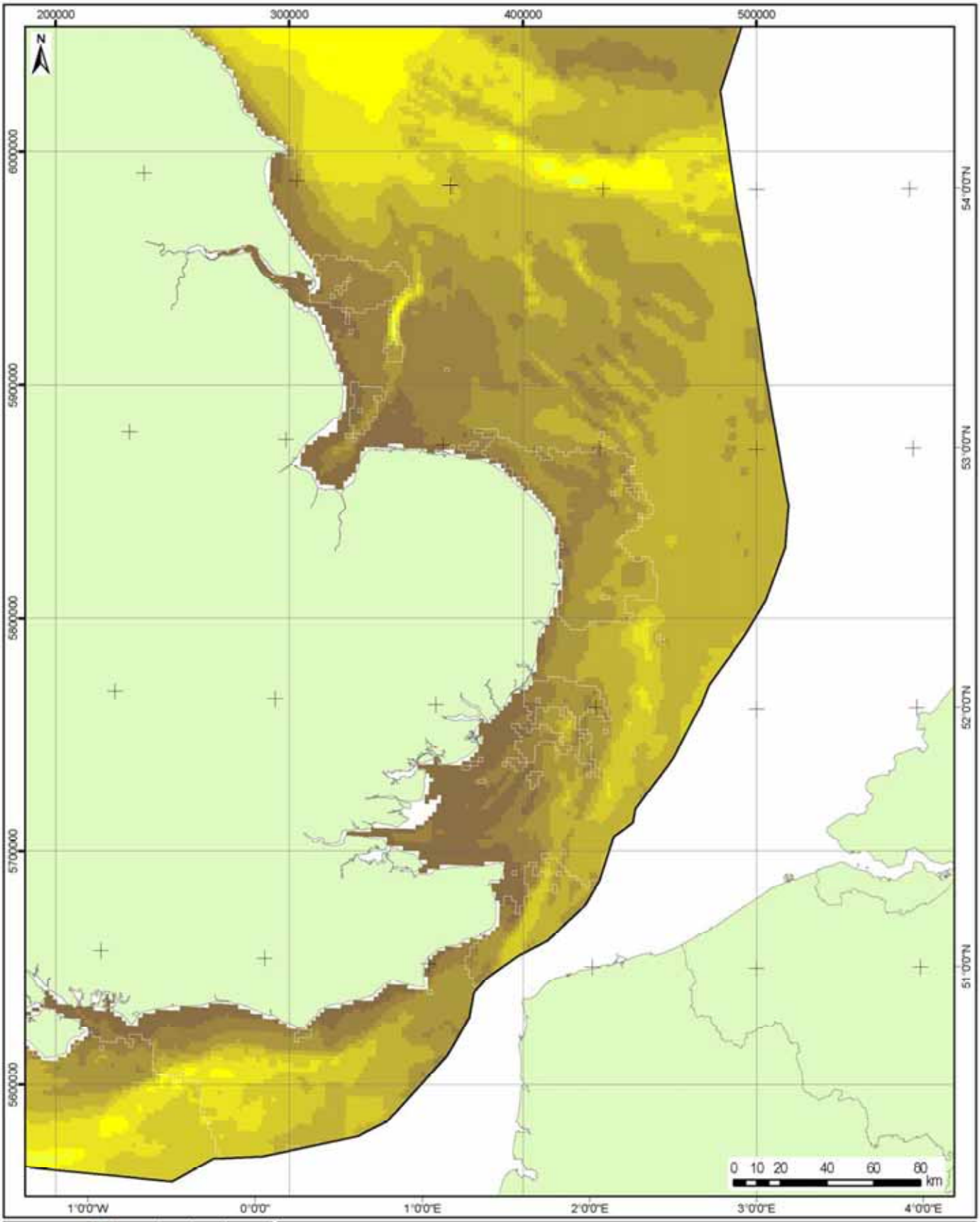
Bathymetry - North

GIS Figure 11



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3671 - Fig_Bathy_E.mxd			
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AOI

Water Depth (m LAT)

<10 | 10 - 20 | 20 - 30 | 30 - 40 | 40 - 50 | 50 - 60 | 60 - 70 | 70 - 80 | 80 - 90 | 90 - 100 | 100 - 150 | 150 - 200 | 200 - 250 | 250 - 300 | 300 - 400 | 400 - 500 | 500 - 1000 | 1000 - 2000 | >2000

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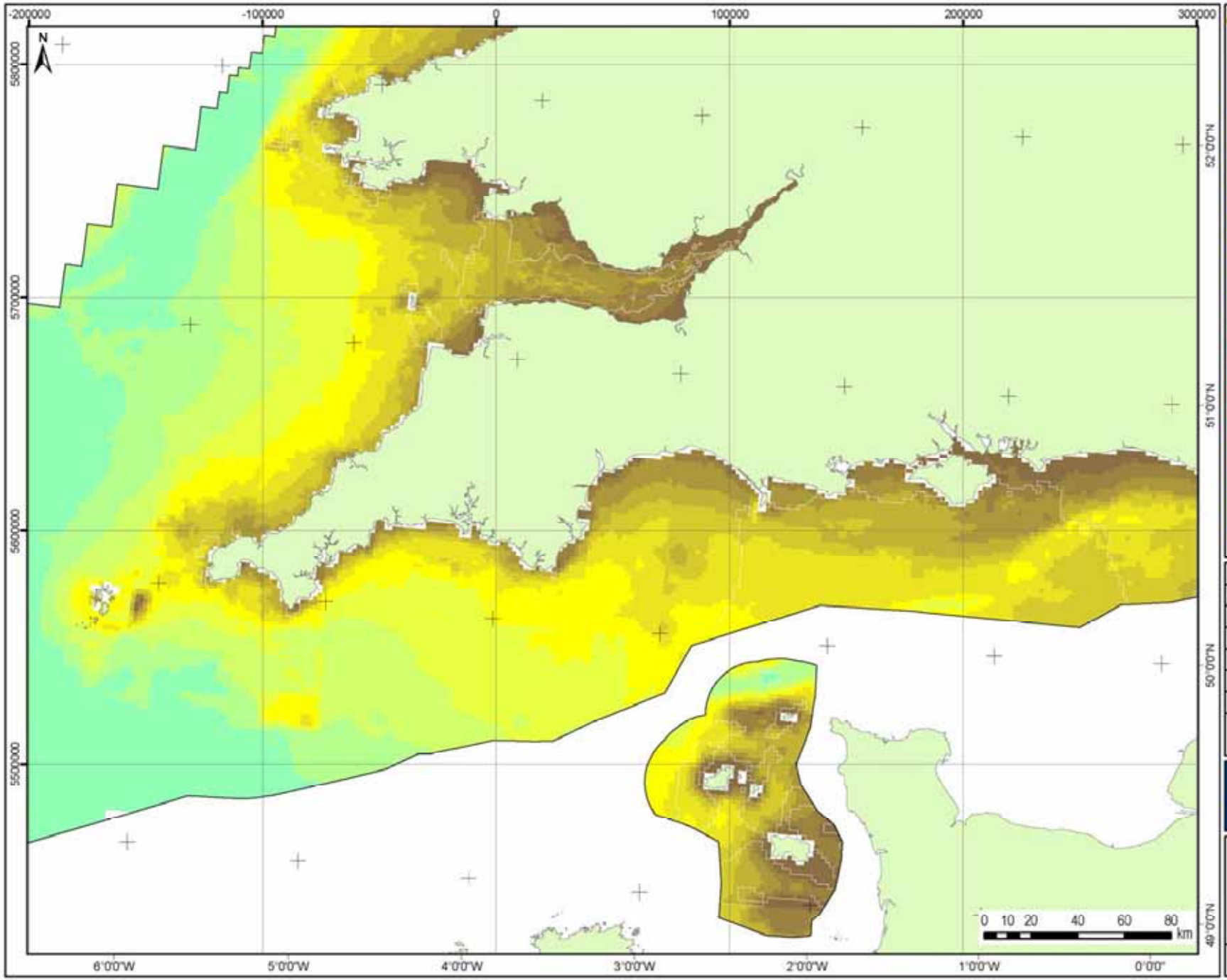
Bathymetry - East

GIS
Figure 12



AOI

Water Depth (m LAT)

- <10
- 10 - 20
- 20 - 30
- 30 - 40
- 40 - 50
- 50 - 60
- 60 - 70
- 70 - 80
- 80 - 90
- 90 - 100
- 100 - 150
- 150 - 200
- 200 - 250
- 250 - 300
- 300 - 400
- 400 - 500
- 500 - 1000
- 1000 - 2000
- >2000

Date	By	Size	Version
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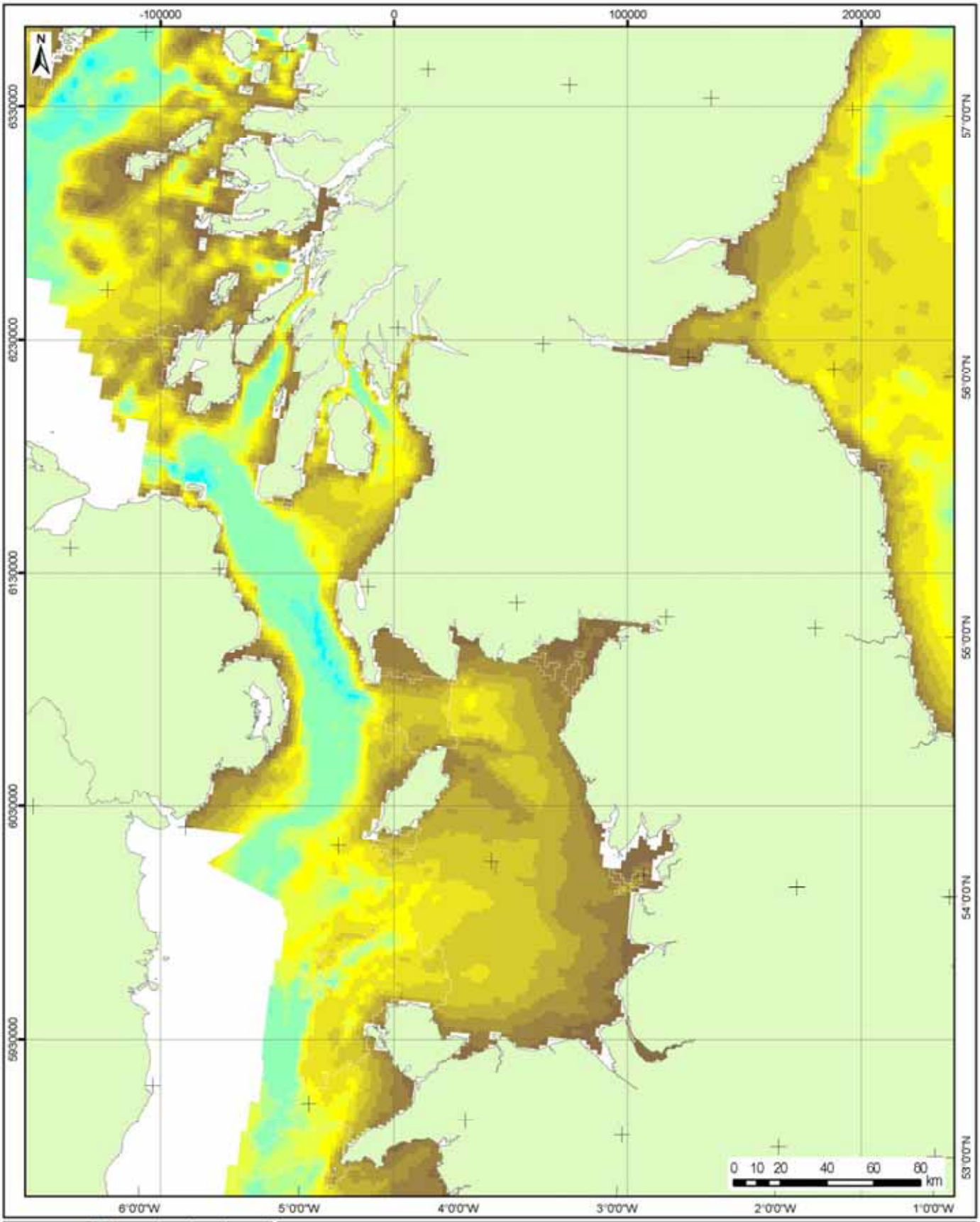
Bathymetry - South

GIS Figure 13



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AOI

Water Depth (m LAT)

<10 | 10 - 20 | 20 - 30 | 30 - 40 | 40 - 50 | 50 - 60 | 60 - 70 | 70 - 80 | 80 - 90 | 90 - 100 | 100 - 150 | 150 - 200 | 200 - 250 | 250 - 300 | 300 - 400 | 400 - 500 | 500 - 1000 | 1000 - 2000 | >2000

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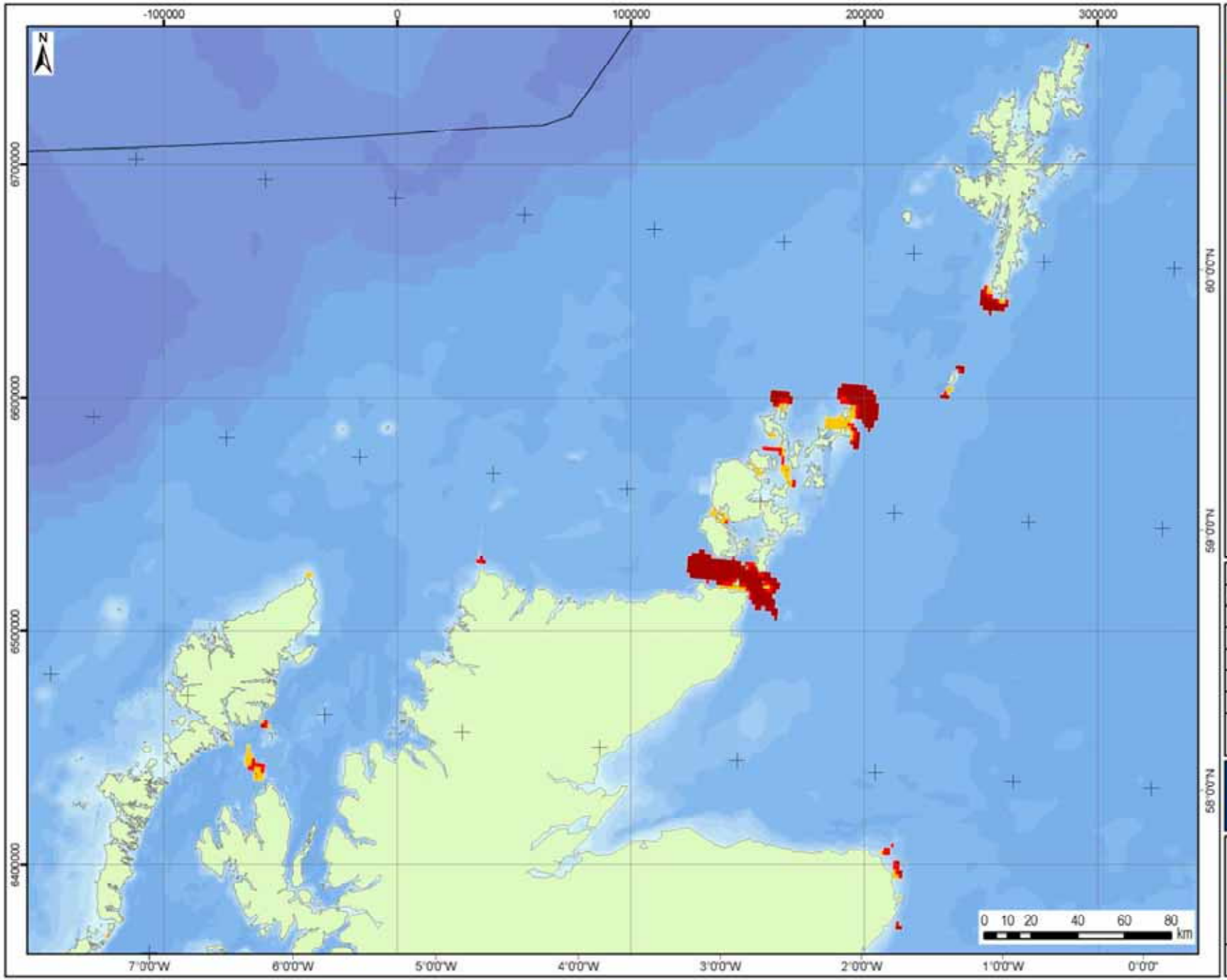
Bathymetry - West

GIS Figure 14



Depth Zone
- Shallow
- Intermediate
- Deep

Date	By	Size	Version
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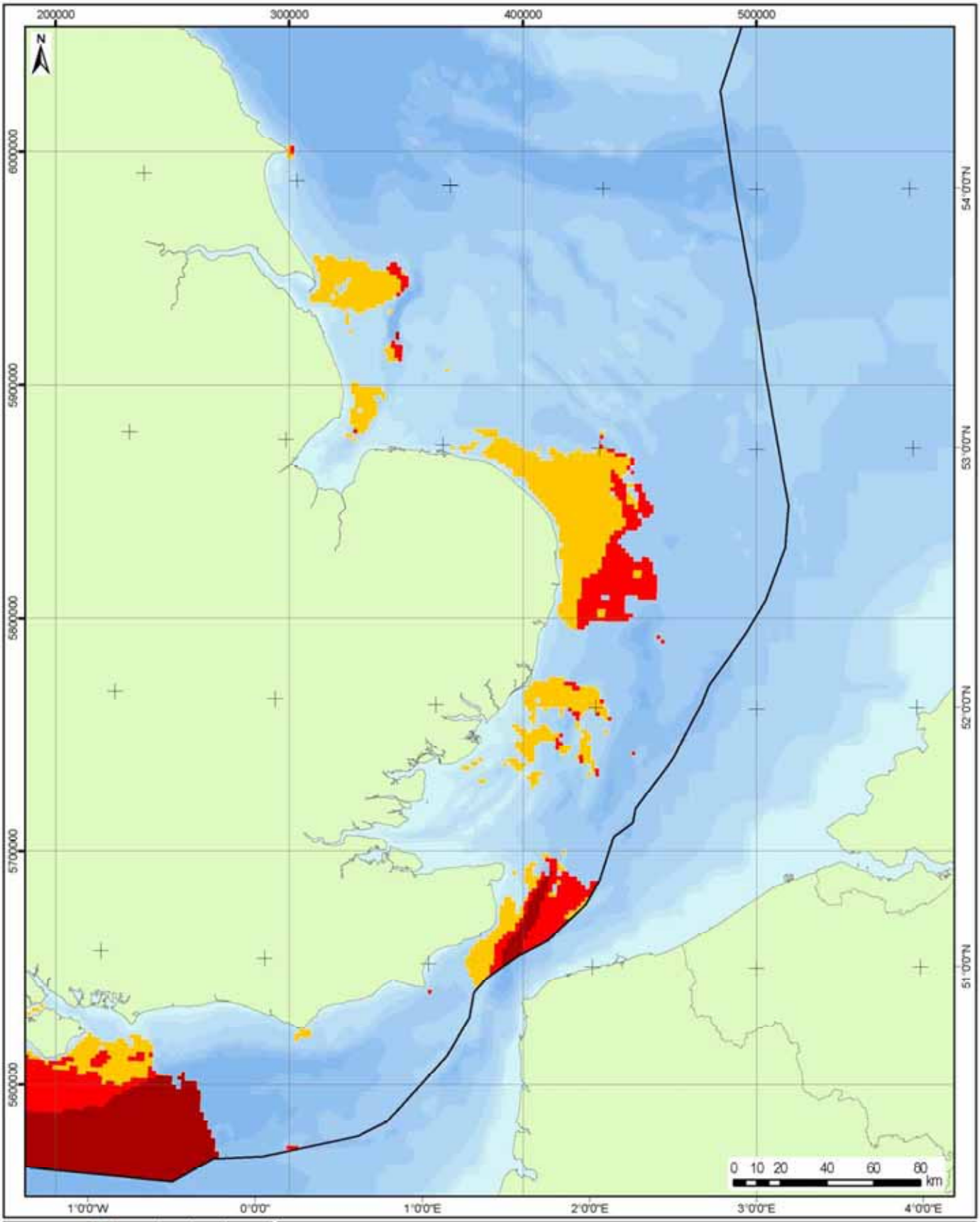
Depth Zones - North

GIS Figure 15



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Depth Zone

- Shallow
- Intermediate
- Deep

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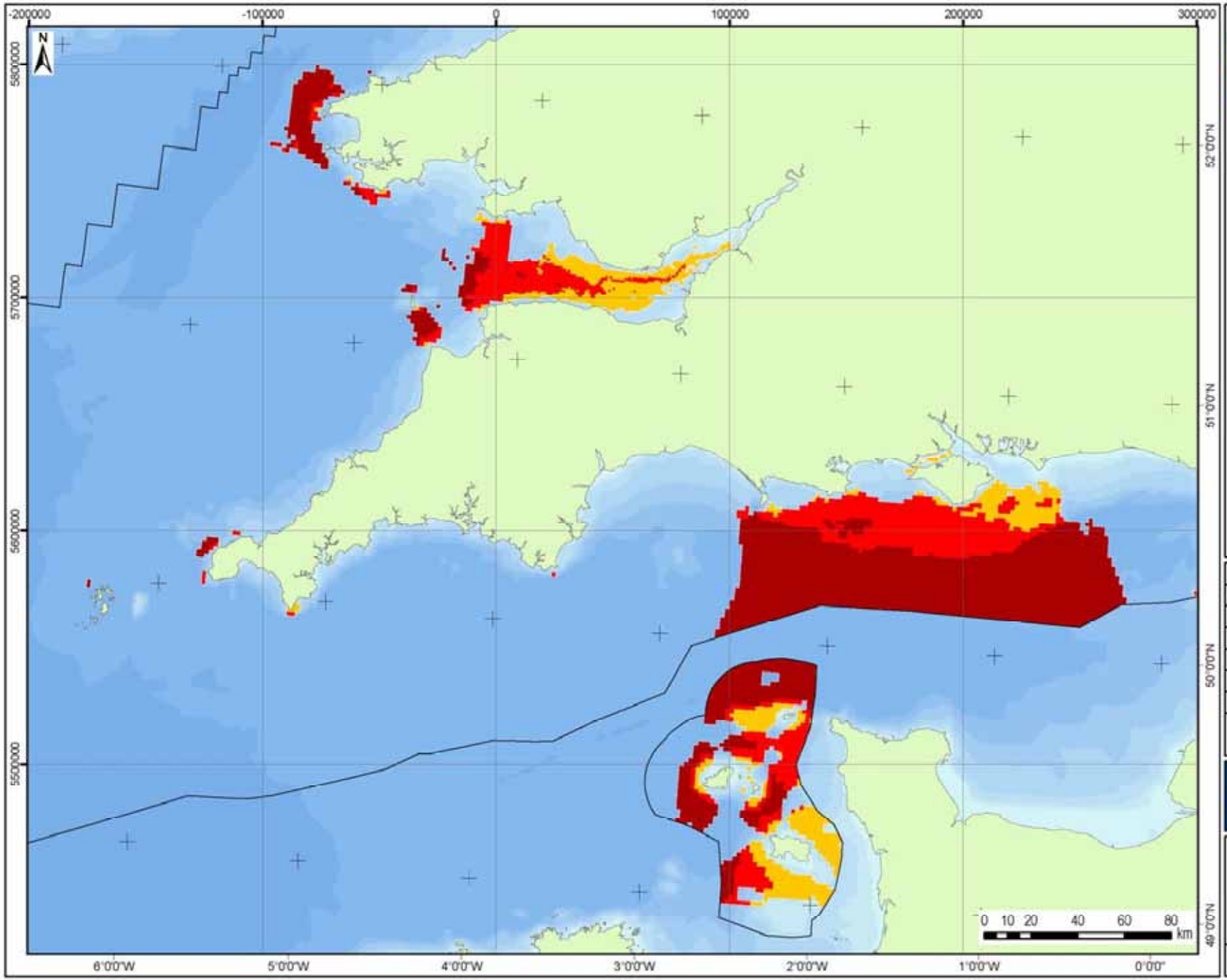
Depth Zones - East

GIS Figure 16



Depth Zone
- Shallow
- Intermediate
- Deep

Date	By	Size	Version
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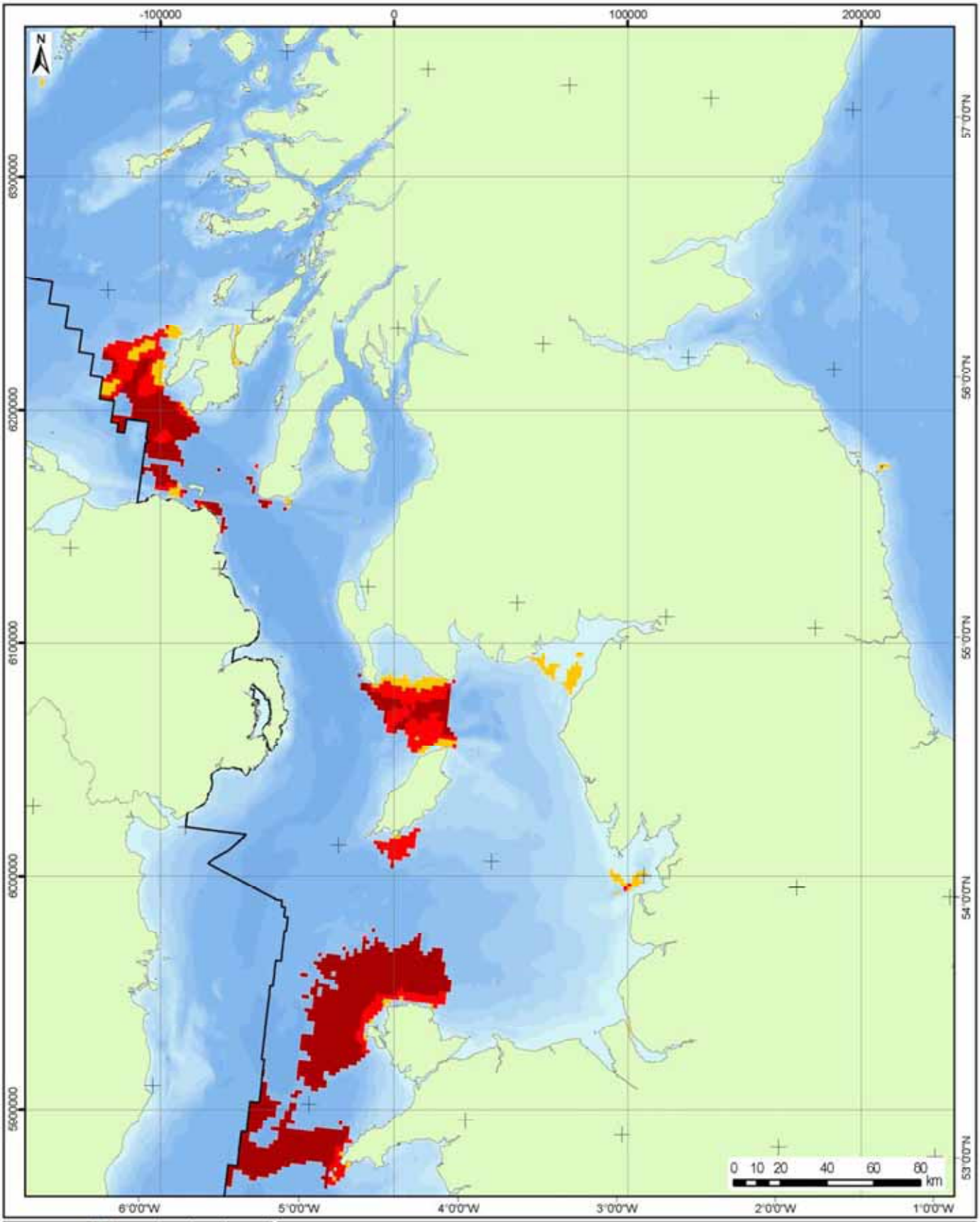
Depth Zones - South

GIS Figure 17



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Reference			
3671 - Fig_DepthZone_W.mxd			
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Depth Zone

- Shallow
- Intermediate
- Deep

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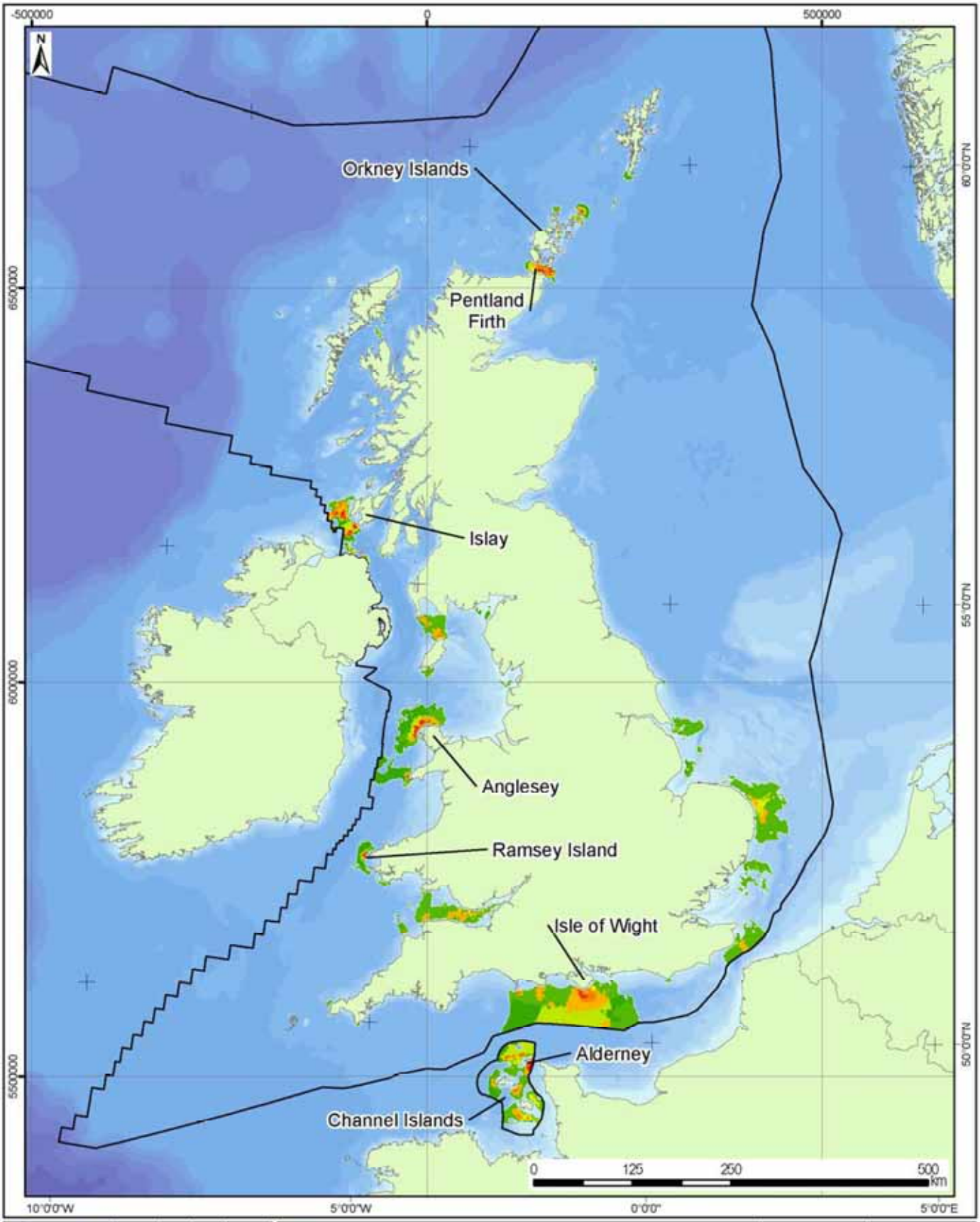
Depth Zones - West

GIS Figure 18



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3671 - Figure_TechA.mxd			
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AOI

Technology Group A

Number of Device Types Predicted per Cell (Total 13)

1 2 3 4 5 6 7 8 9 10 11 12

Min Depth	4 m LAT
Max Depth	100 m LAT
MSPC	>1.5 m/s
Distance to land	50 km

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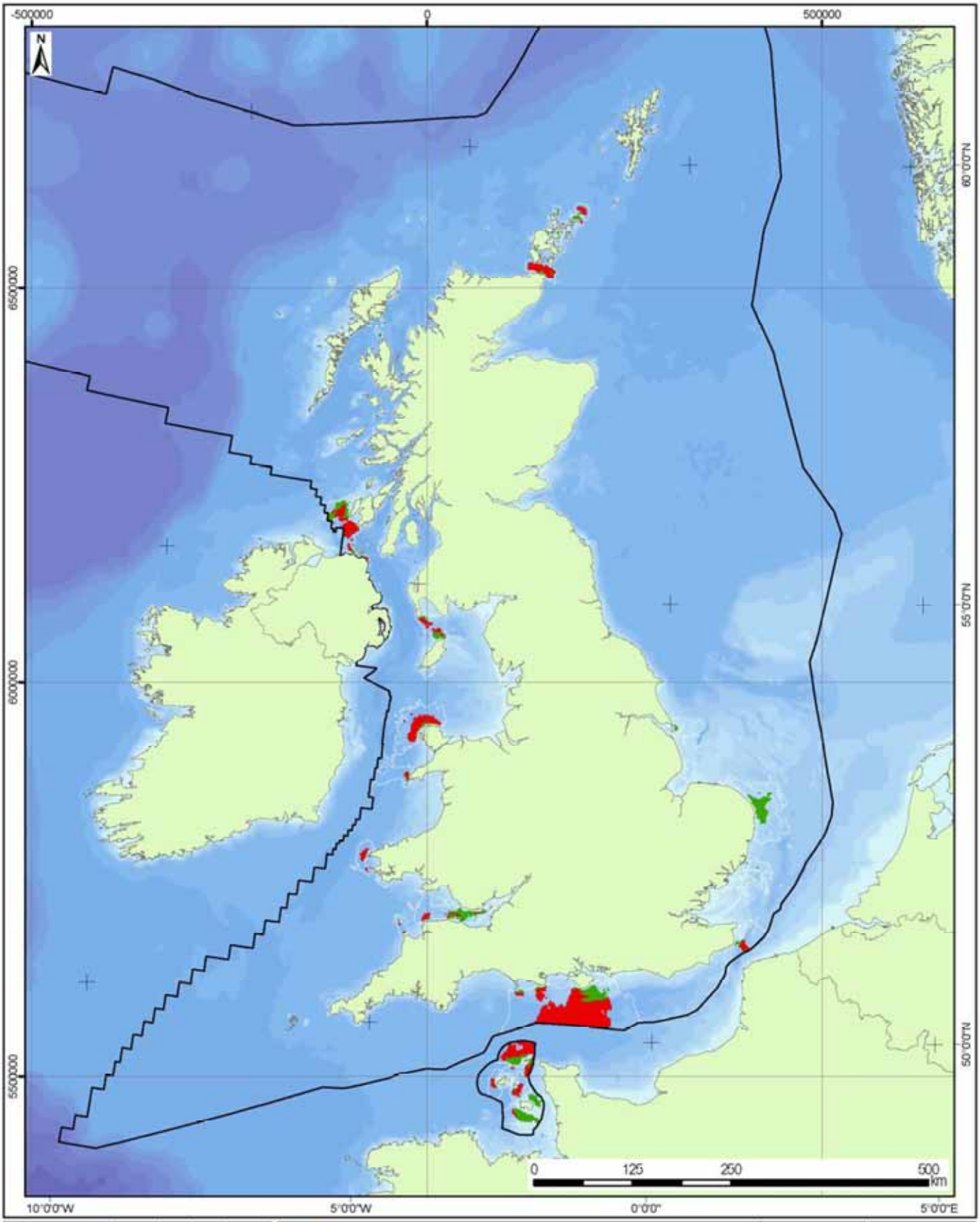
Areas Physically Suitable for the Deployment of Devices in Group A - Horizontal Axial Flow (bi-directional)

GIS Figure 19



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AOI

Technology Group B

Number of Device Types Predicted per Cell (Total 2)

1 2

Min Depth	5 m LAT
Max Depth	100 m LAT
MSPC	>2.0 m/s
Distance to land	50 km

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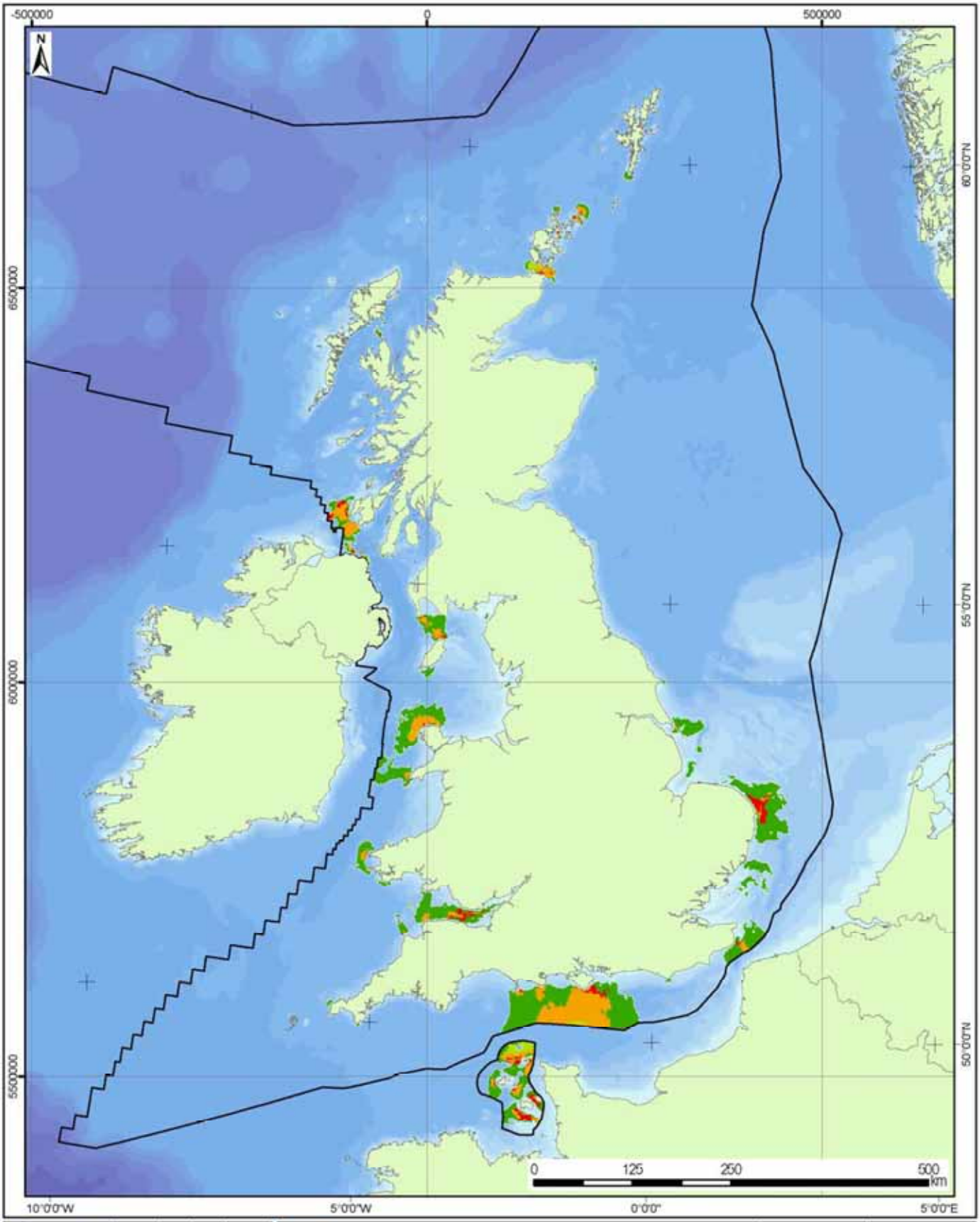
Areas Physically Suitable for the Deployment of Devices in Group B - Horizontal Axial Flow (multi-directional)

GIS Figure 20



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Projection		Scale	
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Reference			
3671 - Figure_TechC.mxd			
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AOI

Technology Group C

Number of Device Types Predicted per Cell (Total 4)

1 2 3 4

Min Depth	6 m LAT
Max Depth	100 m LAT
MSPC	>1.5 m/s
Distance to land	50 km

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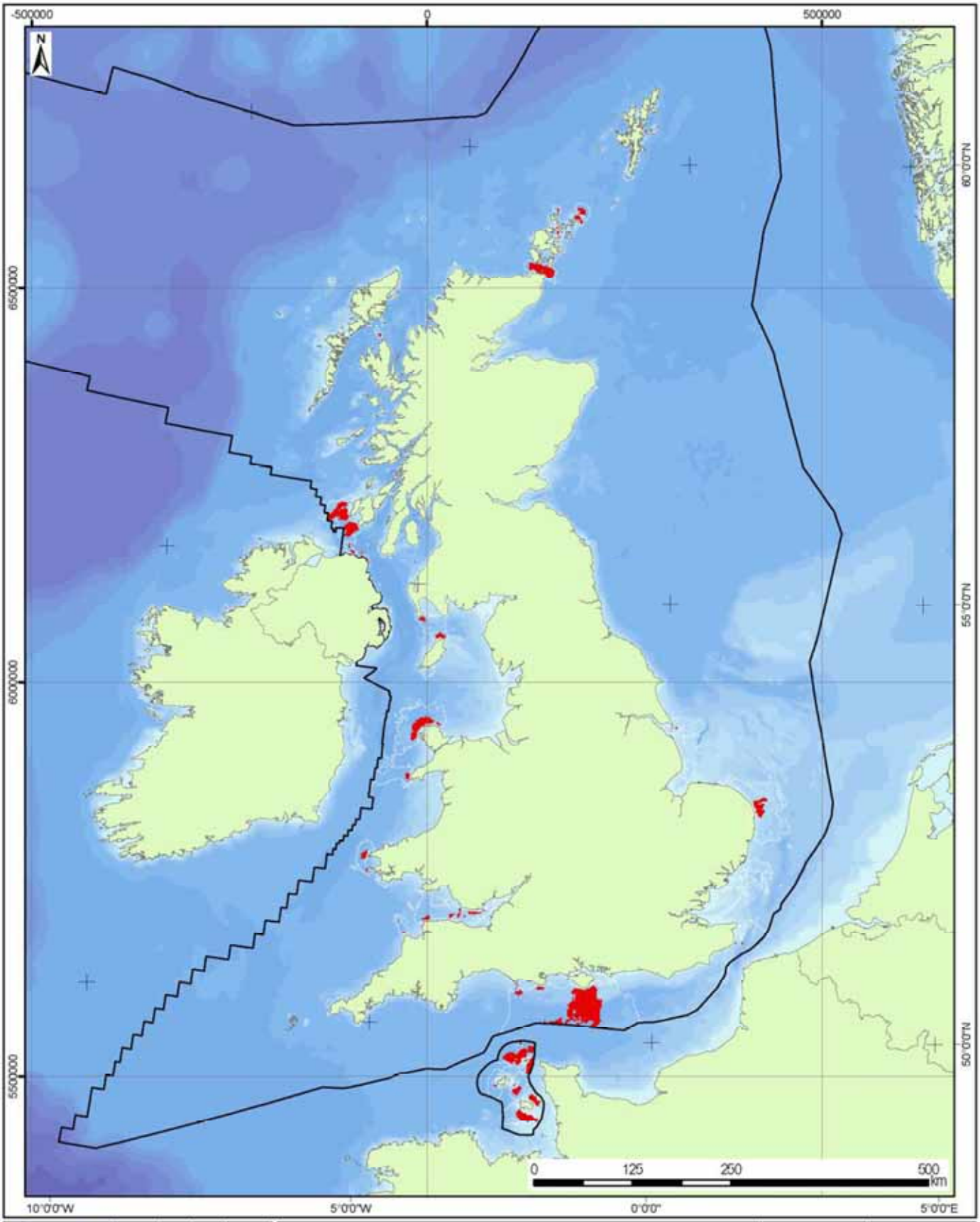
Areas Physically Suitable for the Deployment of Devices in Group C - Vertical Axis

GIS Figure 21



Date	By	Size	Version
Apr 2007	DP	A4	1
Projection		Scale	
WGS UTM 31N		1:6,800,000	
Reference			
3671 - Figure_TechD.mxd			
Produced by ABPmer Ltd			

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AOI

Technology Group D

Number of Device Types Predicted per Cell (Total 1)

Min Depth	10 m LAT
Max Depth	100 m LAT
MSPC	>2.2 m/s
Distance to land	50 km

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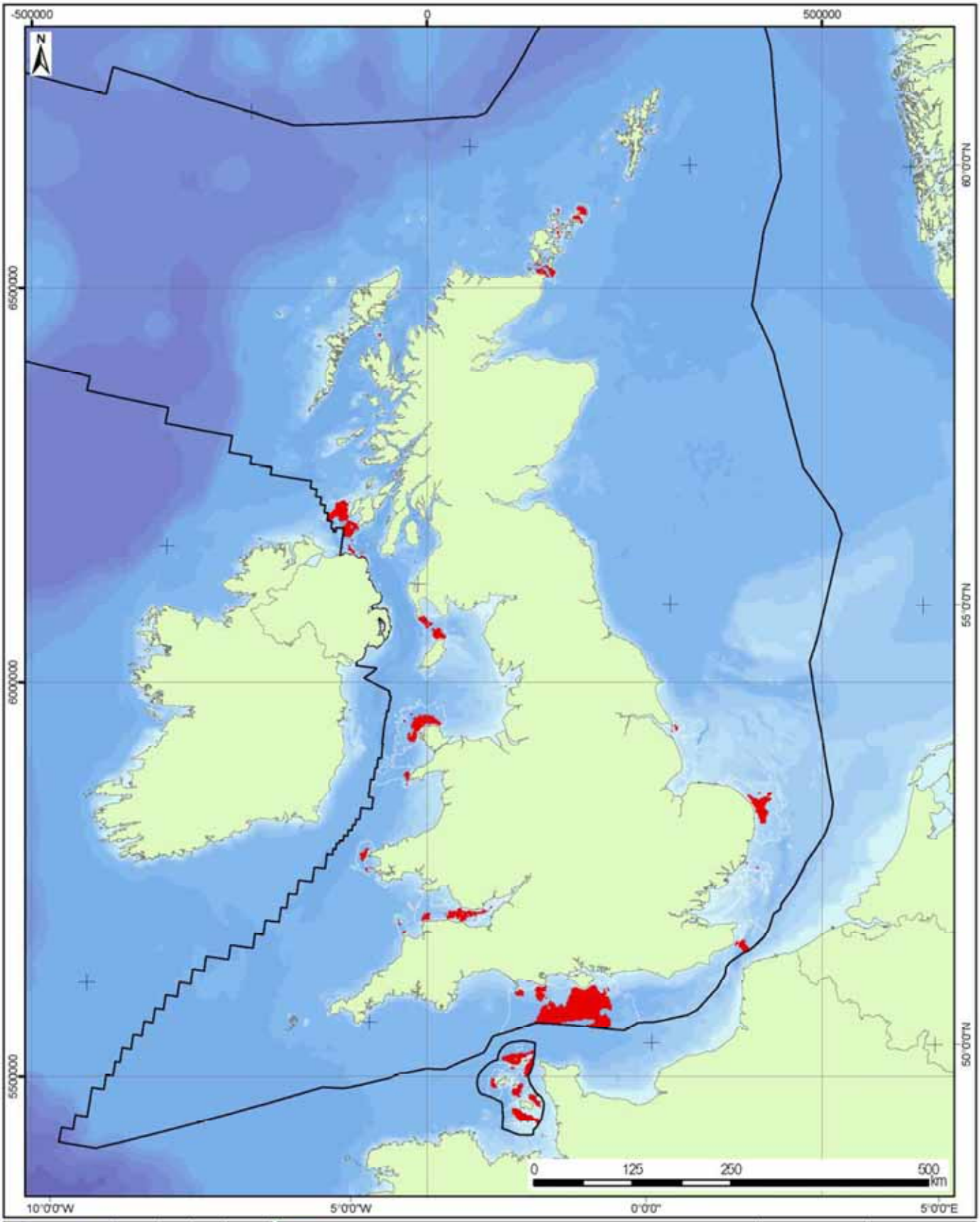
Areas Physically Suitable for the Deployment of Devices in Group D - Oscillating Hydrofoil

GIS Figure 22



Date	By	Size	Version
Apr 2007	DP	A4	1
Projection		Scale	
WGS UTM 31N		1:6,800,000	
Reference			
3671 - Figure_TechE.mxd			
Produced by ABPmer Ltd			

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AOI

Technology Group E

Number of Device Types Predicted per Cell (Total 1)

Min Depth	10 m LAT
Max Depth	60 m LAT
MSPC	>2.0 m/s
Distance to land	50 km

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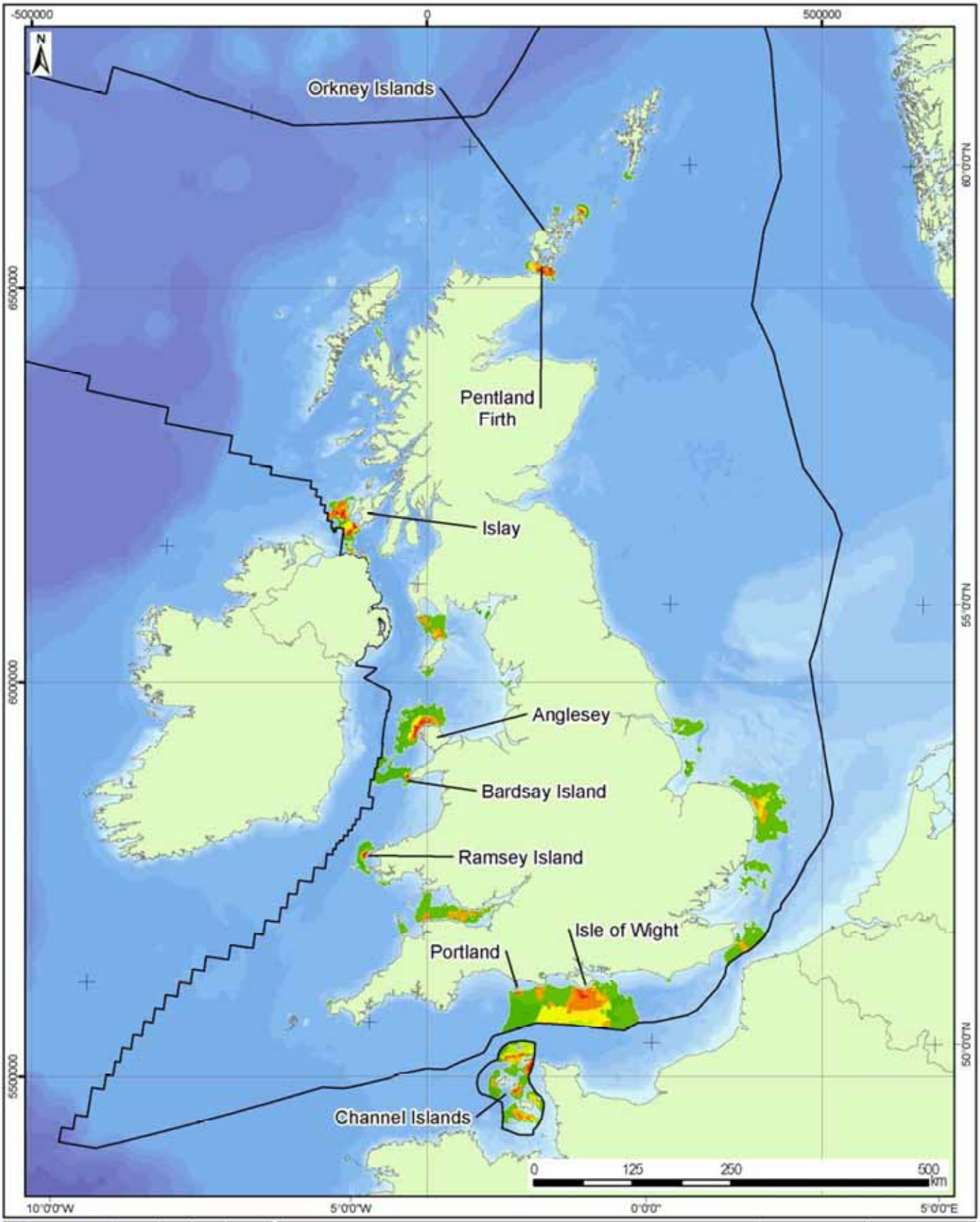
Areas Physically Suitable for the Deployment of Devices in Group E - Air Injection Technology

GIS Figure 23



Date	By	Size	Version
Apr 2007	DP	A4	1
Projection		Scale	
WGS UTM 31N		1:6,800,000	
Reference			
3671 - Figure_AllTech.mxd			
Produced by ABPmer Ltd			

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AOI

All Technology Groups (A to E)

Number of Device Types Predicted per Cell (Total 21)

1 2 3 4 5 9 10 11 12 13 14 15 16 17 18 19

Min Depth	4 m LAT
Max Depth	100 m LAT
MSPC	>1.5 m/s
Distance to land	50 km

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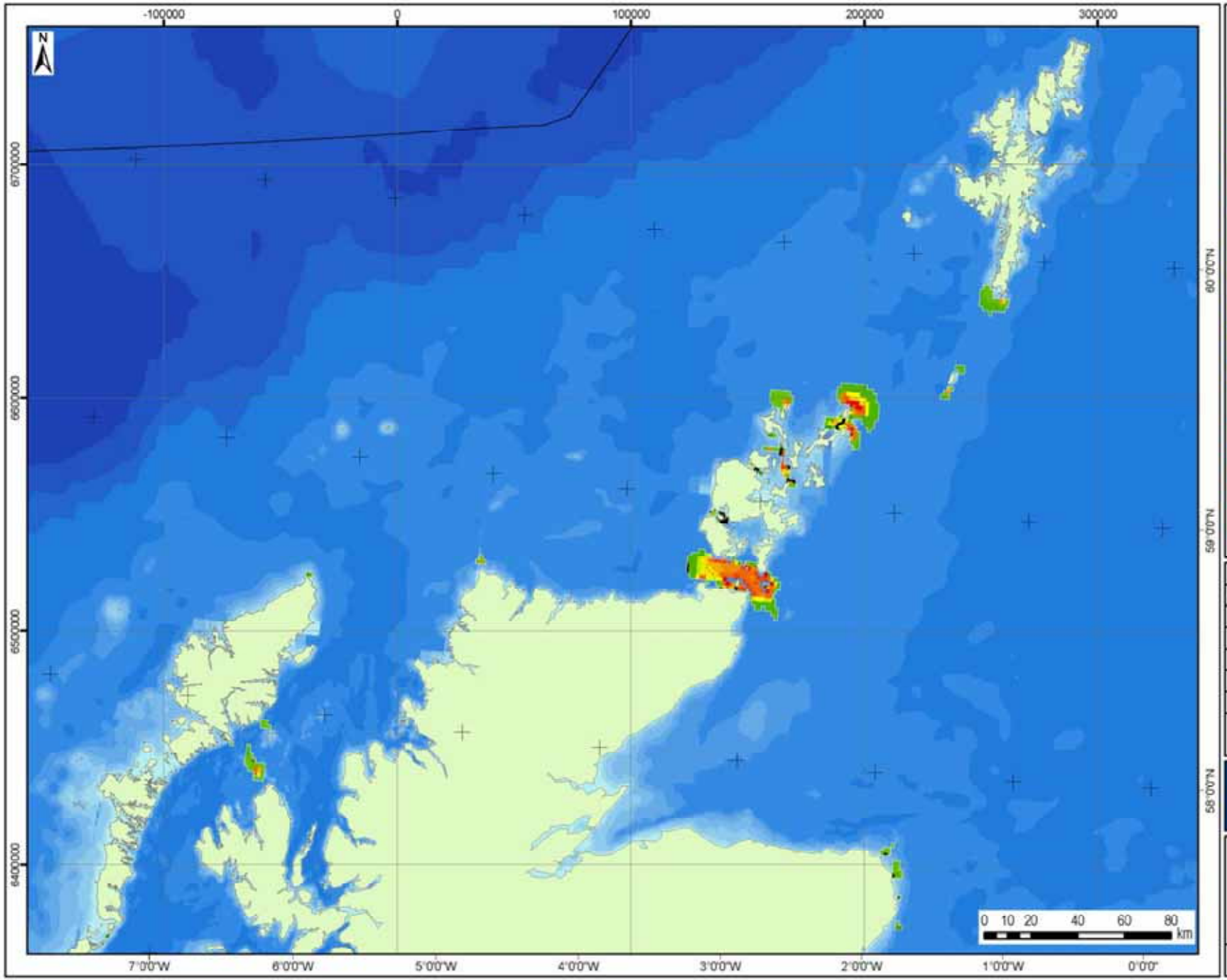
Areas Physically Suitable for the Deployment of All Devices (Groups A - E)

GIS Figure 24



Exclusion Area

All Technology Groups (A to E)
No. of Device Types (Total 21)

- 1
- 2
- 3
- 5
- 6
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_AllTech_Exclusion_N.mxd			
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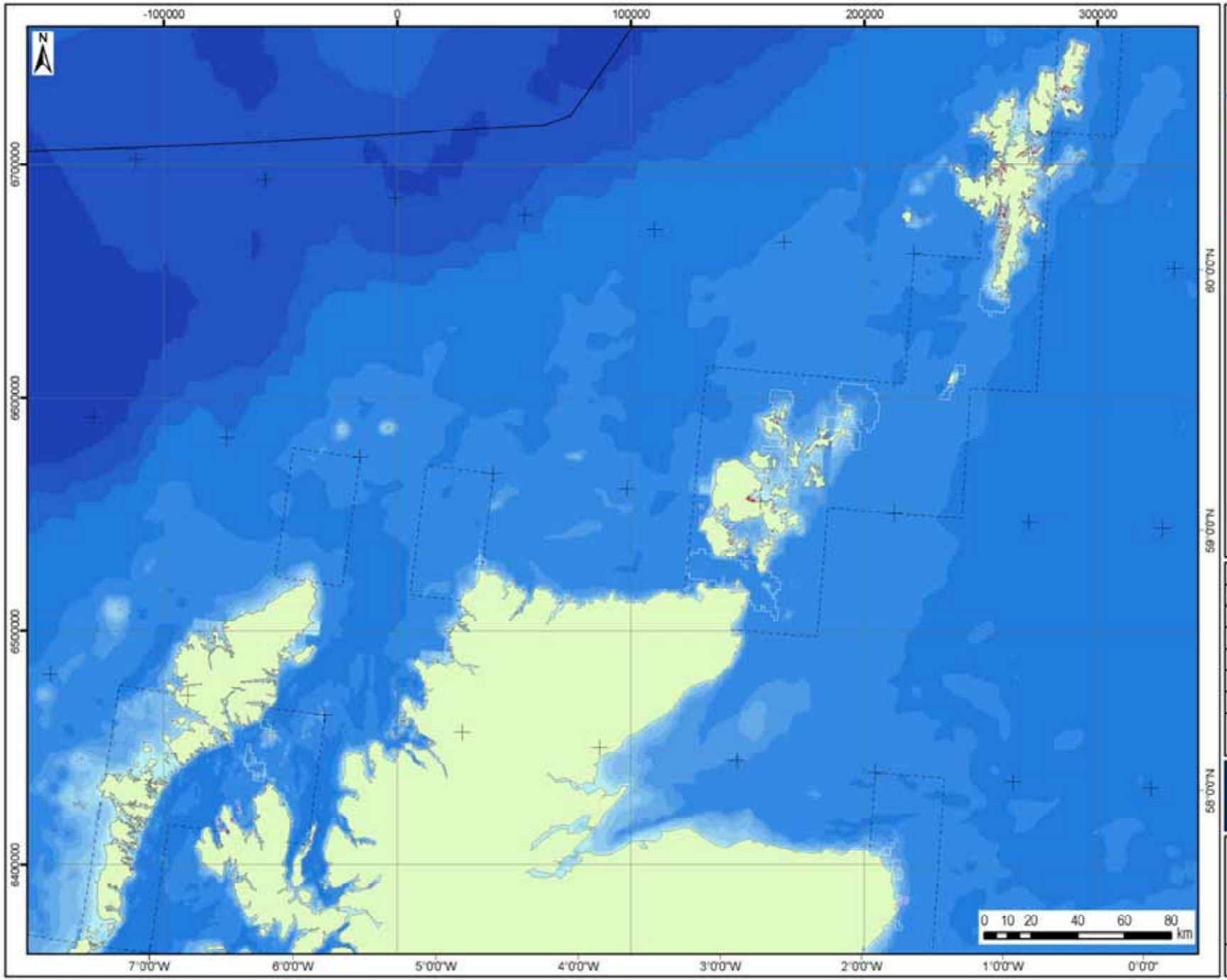
Areas Excluded - North

GIS Figure 25



Study Area

Data Extent

AOI

Anchorage area

Disposal Site

Fish Farm

Maintenance Dredging

Aggregate Licence Area

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Activities_N.mxd			
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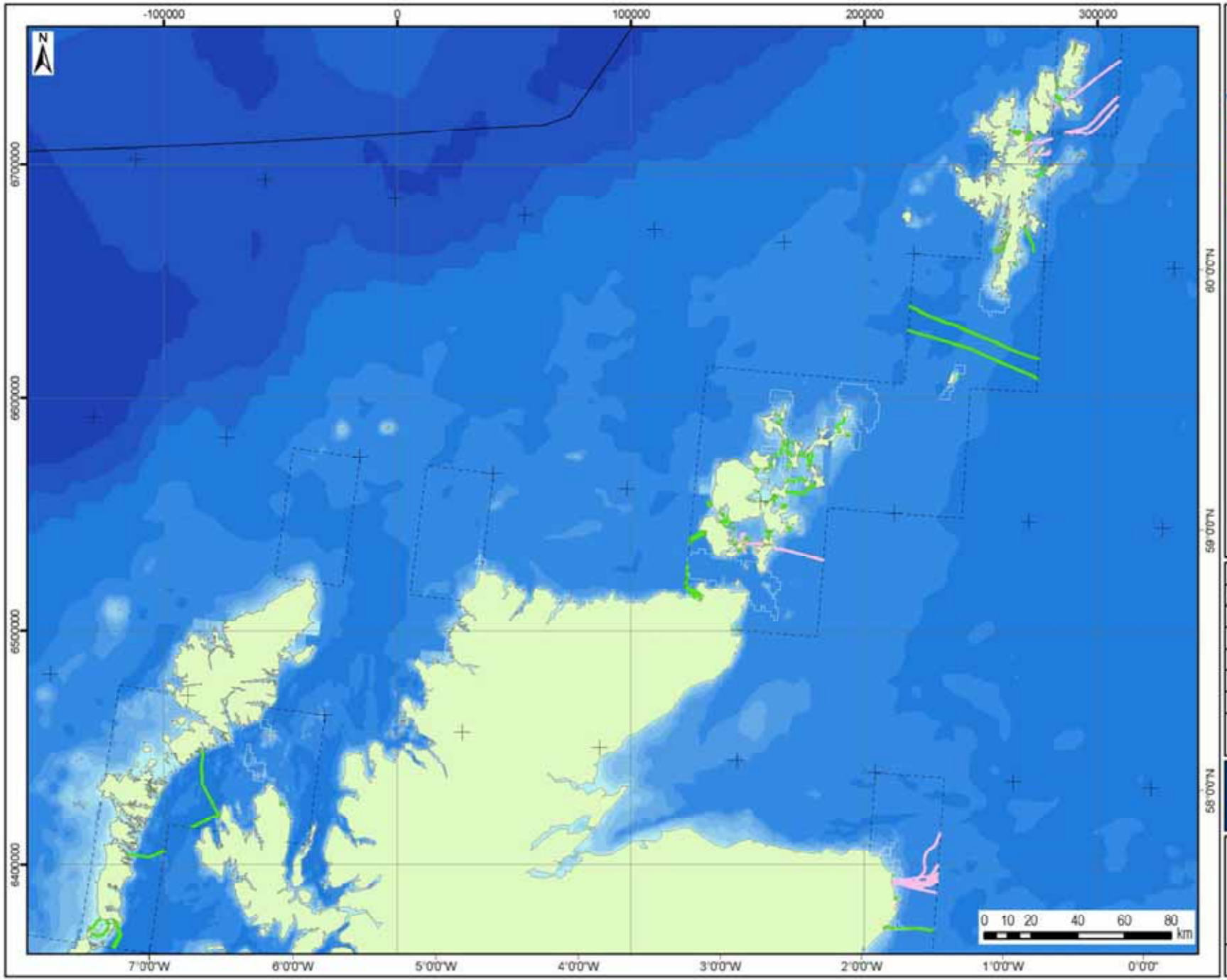
MSP Exclusion Constraints: Activities - North

GIS Figure 26



Study Area

Data Extent

AOI

Windfarm (Round 1)

Windfarm (Round 2)

Cable

Pipeline

Oil & Gas Infrastructure including Wells

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_EnergyInstall_N.mxd			
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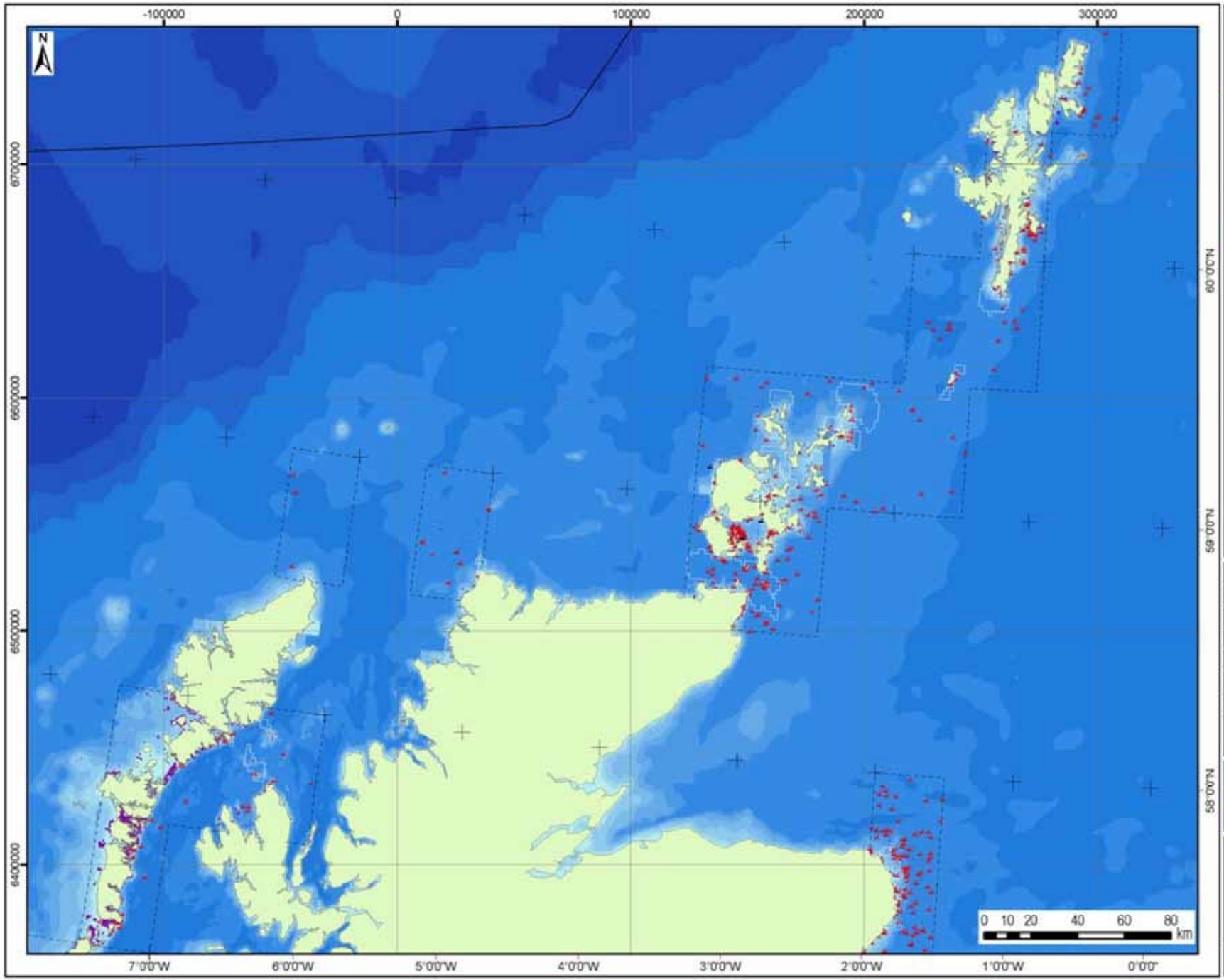
MSP Exclusion Constraints: Installations - North

GIS Figure 27



Study Area
Data Extent
AOI
Military Wreck
Protected Wreck
Wreck
Obstruction

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Obstructions_N.mxd			
Produced by ABPmer Ltd			

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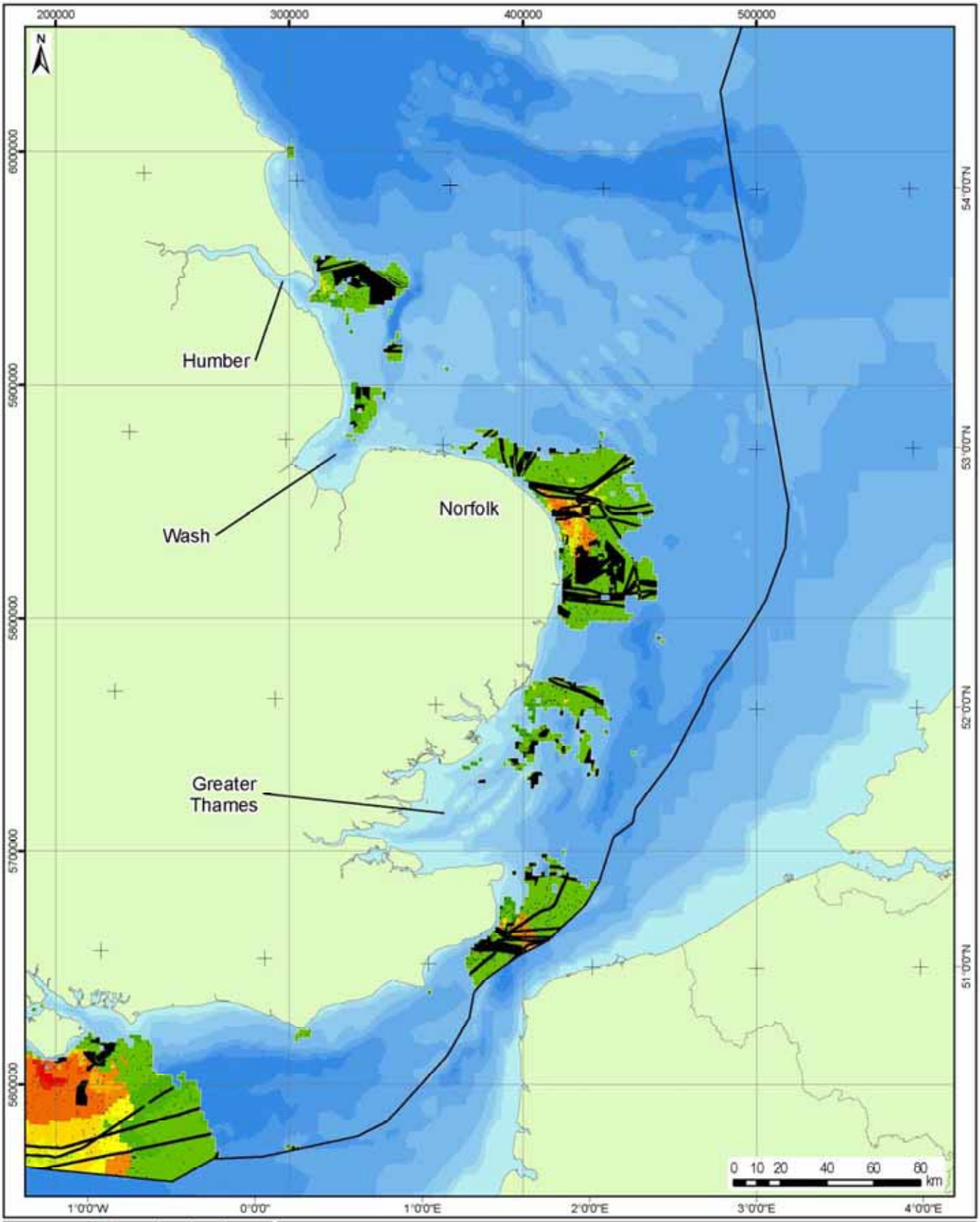
MSP Exclusion Constraints: Obstructions - North

GIS Figure 28



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_AllTech_Exclusion_E.mxd			
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Exclusion Area

All Technology Groups (A to E)

Number of Device Types (Total 21)

1 2 3 5 6 9 10 11 12 13 14 15 16 17 18

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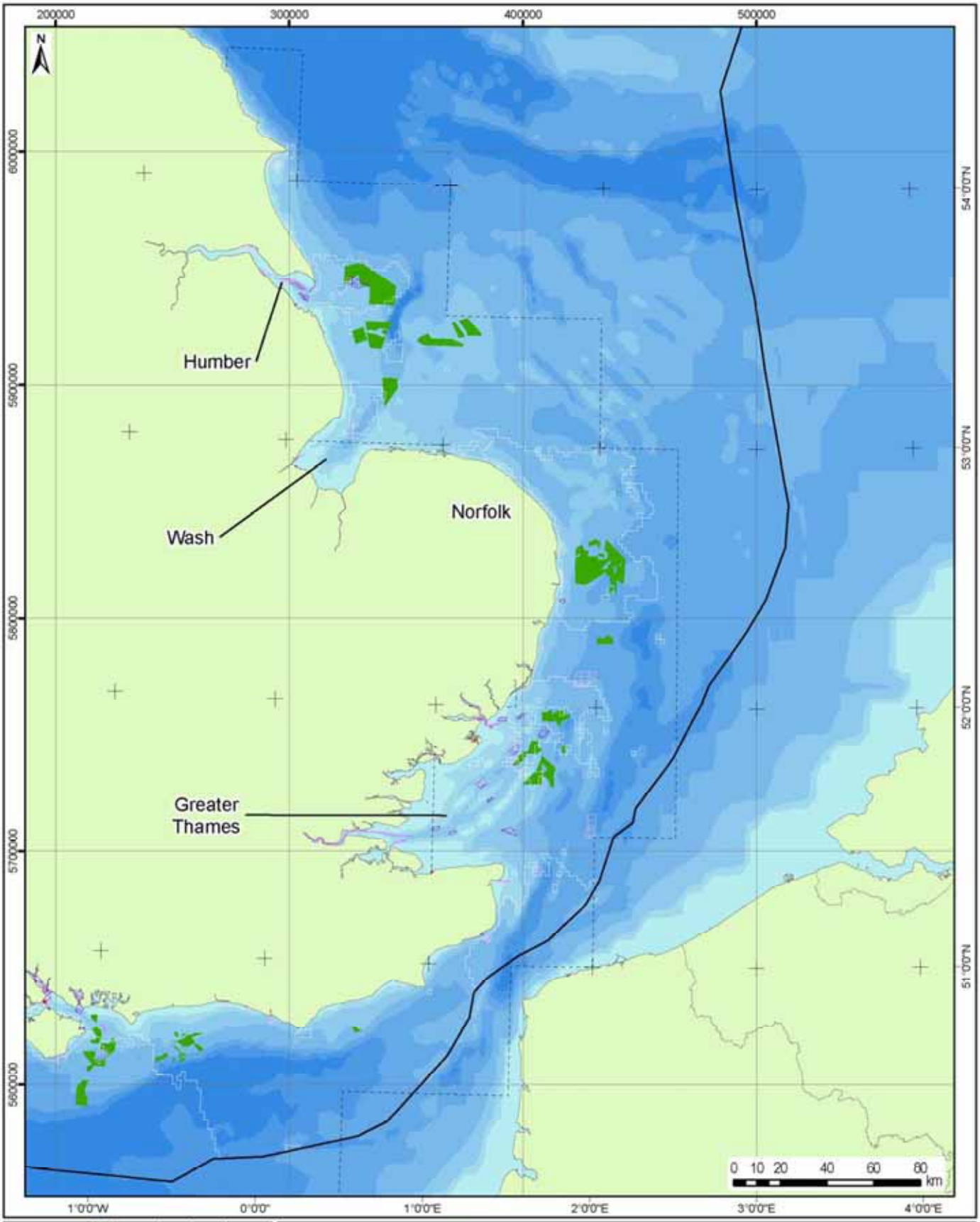
Areas Excluded - East

GIS Figure 29



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Activities_E.mxd			
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- Study Area
- Data Extent
- AOI
- Anchorage Area
- Disposal Site
- Fish Farm
- Maintenance Dredging
- Aggregate Licence Area

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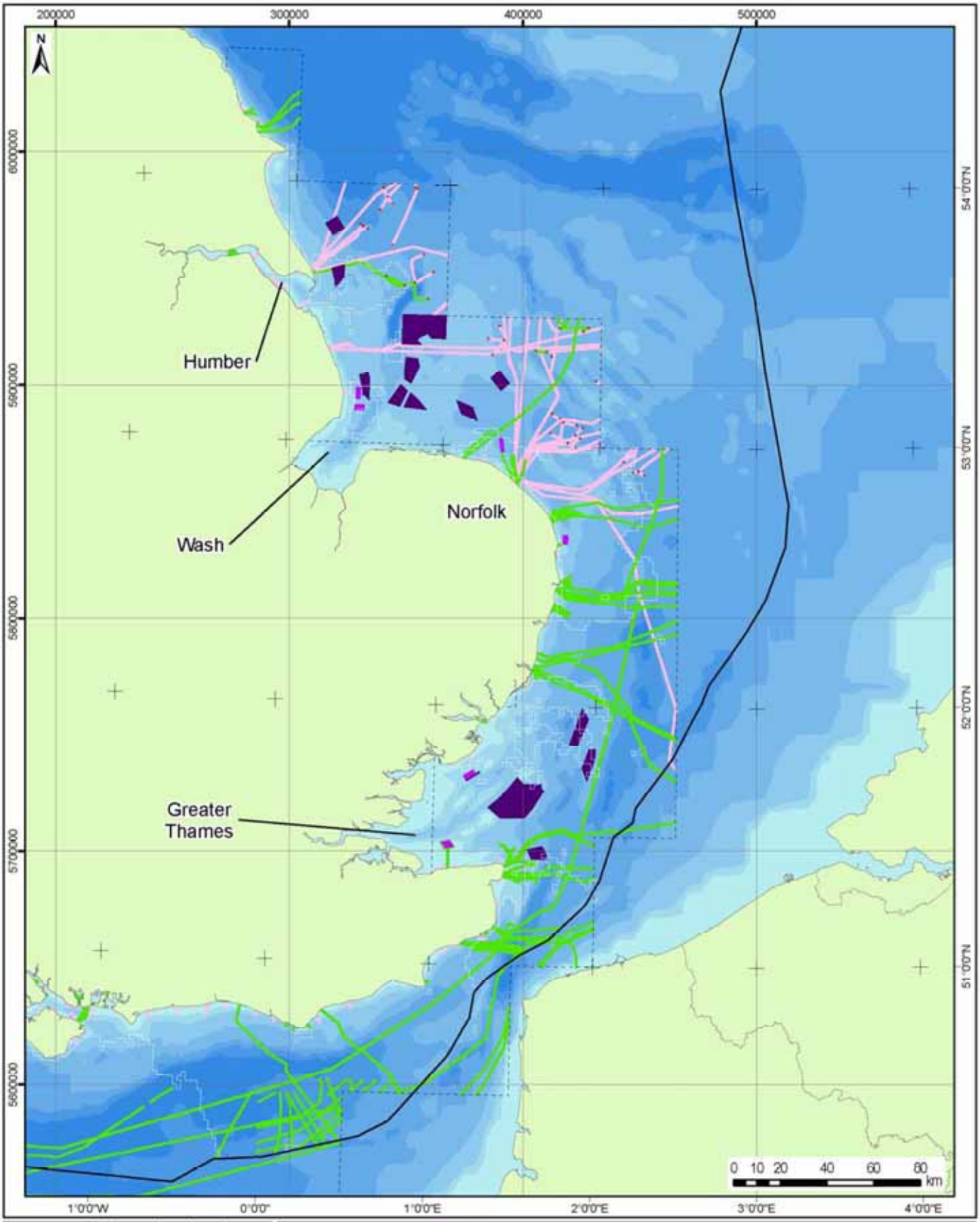
MSP Exclusion Constraints: Activities - East

GIS Figure 30



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Energy_E.mxd			
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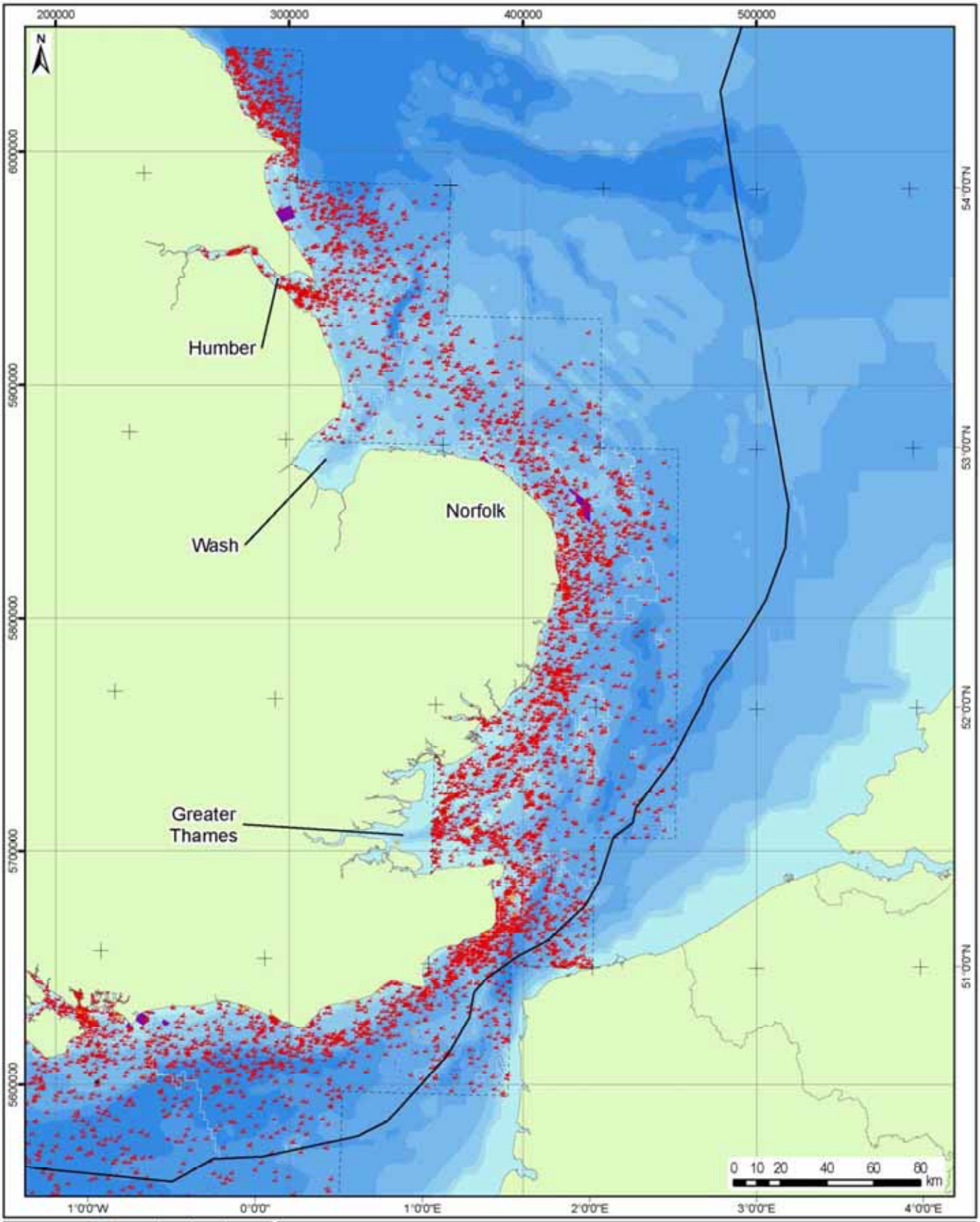
- Study Area
- Data Extent
- AOI
- Windfarm (Round 1)
- Windfarm (Round 2)
- Cable
- Pipeline
- Oil and Gas Infrastructure Including Wells

ABP mer
marine environmental research

MSP Exclusion Constraints: Installations - East

GIS Figure 31



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Obstructions_E.mxd			
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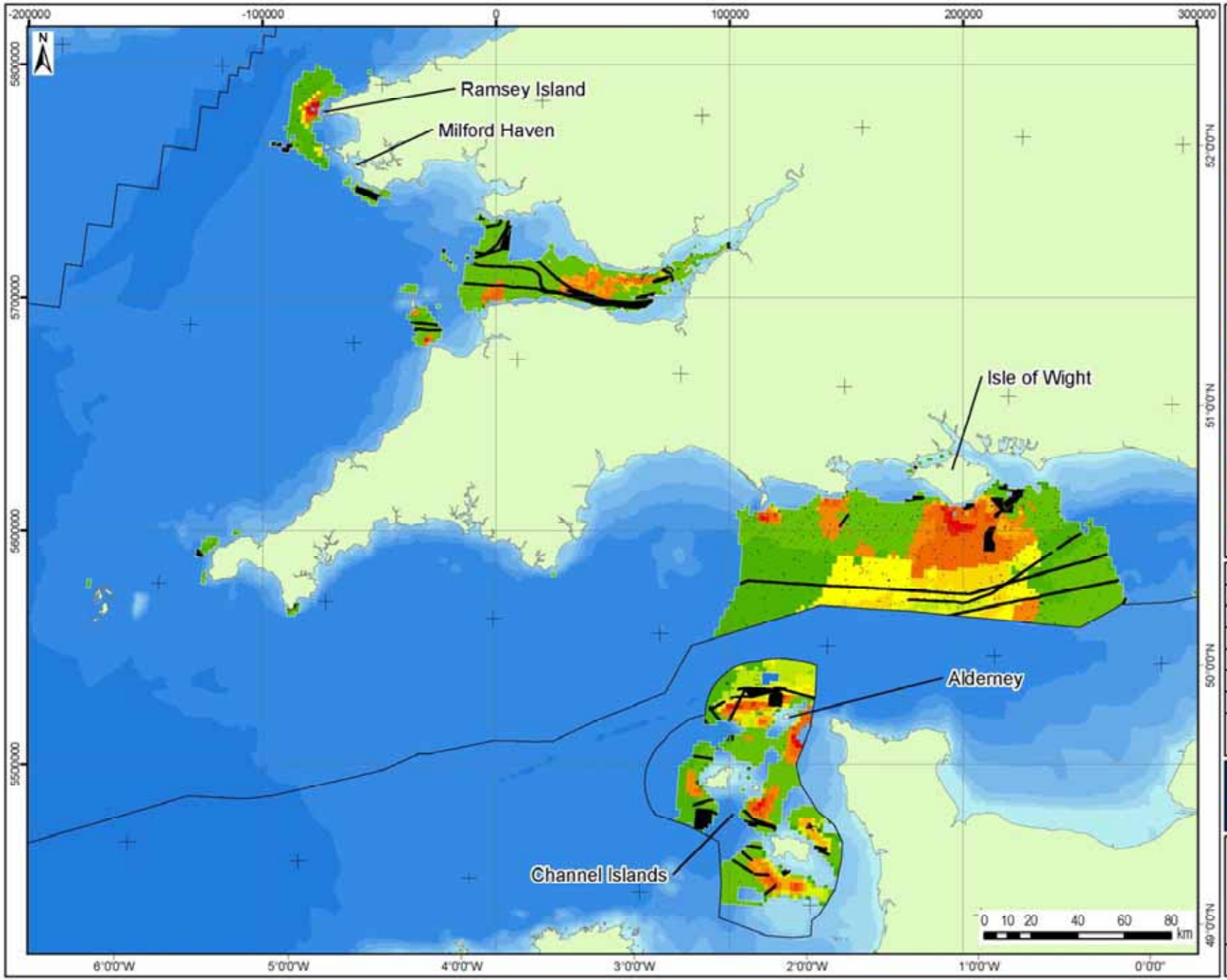
Study Area
Data Extent
AOI
Wreck
Military Wreck
Protected Wreck
Obstruction

ABP mer
marine environmental research

MSP Exclusion Constraints: Obstructions - East

GIS Figure 32



Exclusion Area

All Technology Groups (A to E)
No. of Device Types (Total 21)

- 1
- 2
- 3
- 5
- 6
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_AllTech_Exclusion_5.mxd			
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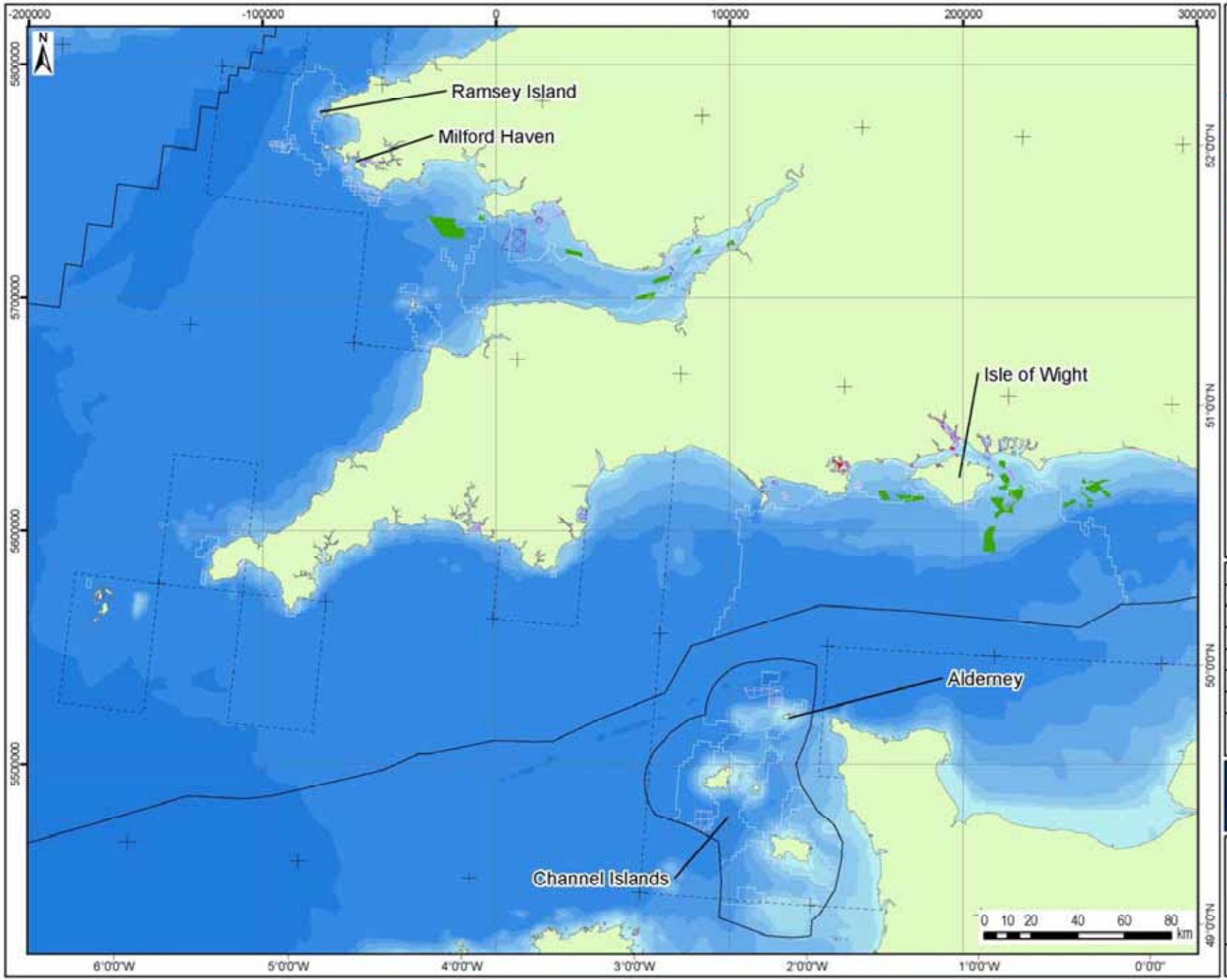
Areas Excluded - South

GIS Figure 33



Study Area
Data Extent
AOI
Anchorage Area
Disposal Site
Fish Farm
Maintenance Dredging
Aggregate Licence Area

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Activities_S.mxd			
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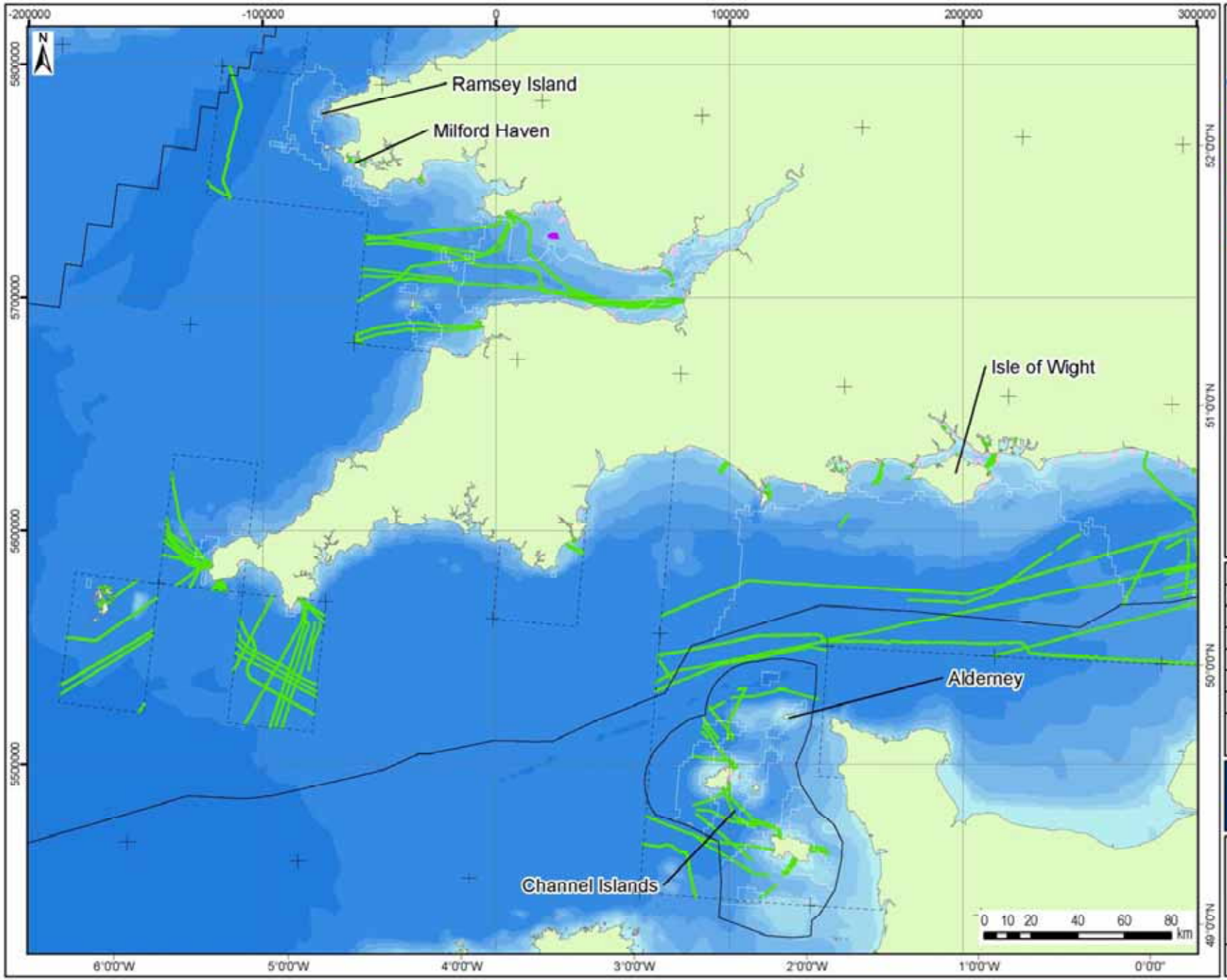
MSP Exclusion Constraints: Activities - South

GIS Figure 34



Study Area
Data Extent
AOI
Windfarm (Round 1)
Windfarm (Round 2)
Cable
Pipeline
Oil & Gas Infrastructure including Wells

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_EnergyInstall_S.mxd			
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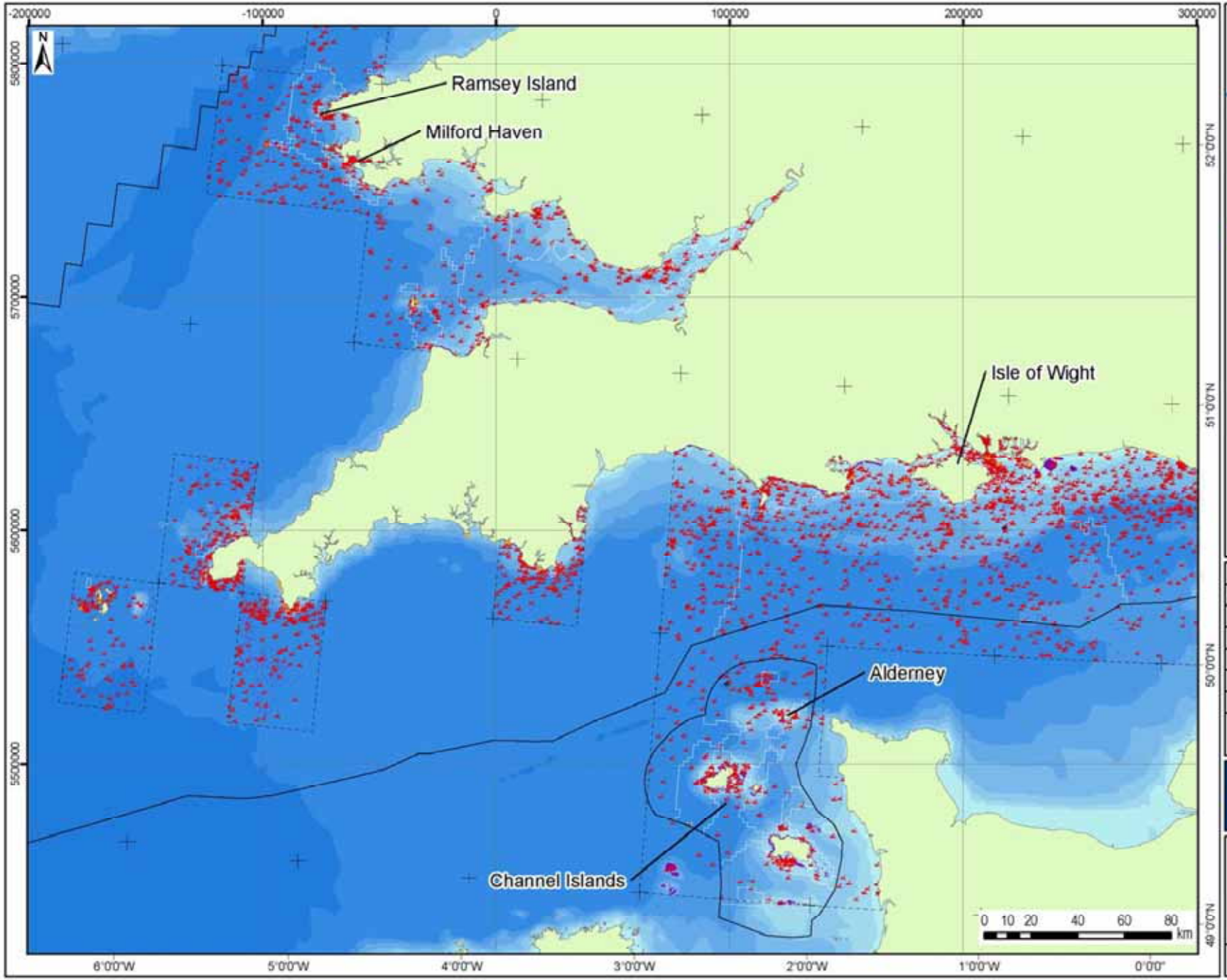
MSP Exclusion Constraints: Installations - South

GIS Figure 35



Study Area
Data Extent
AOI
Wreck
Military Wreck
Protected Wreck
Obstruction

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Obstructions_S.mxd			
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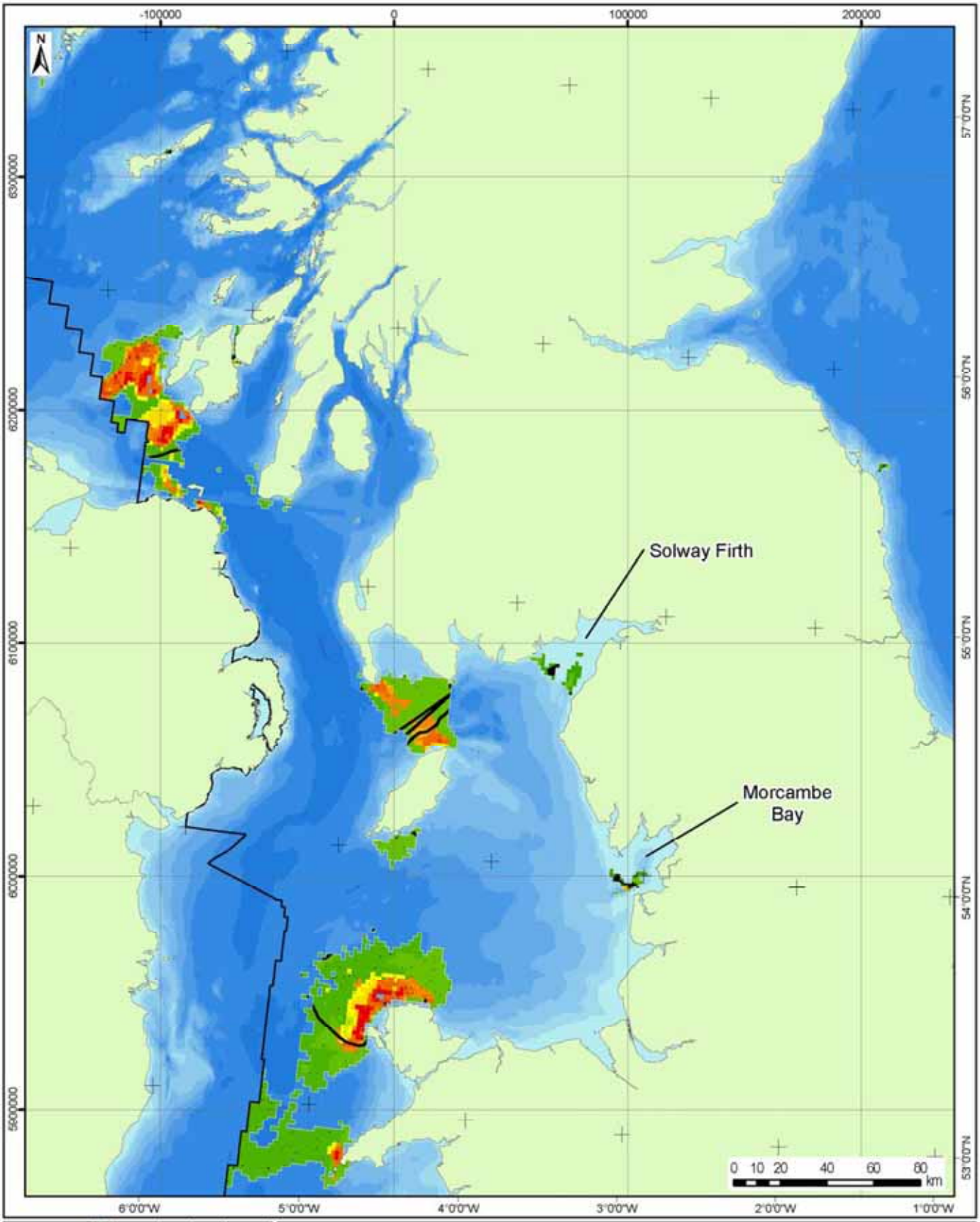
MSP Exclusion Constraints: Obstructions - South

GIS Figure 36



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_AllTech_Exclusion_W.mxd			
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Exclusion Area

All Technology Groups (A to E)

Number of Device Types (Total 21)

1 2 3 5 6 9 10 11 12 13 14 15 16 17 18

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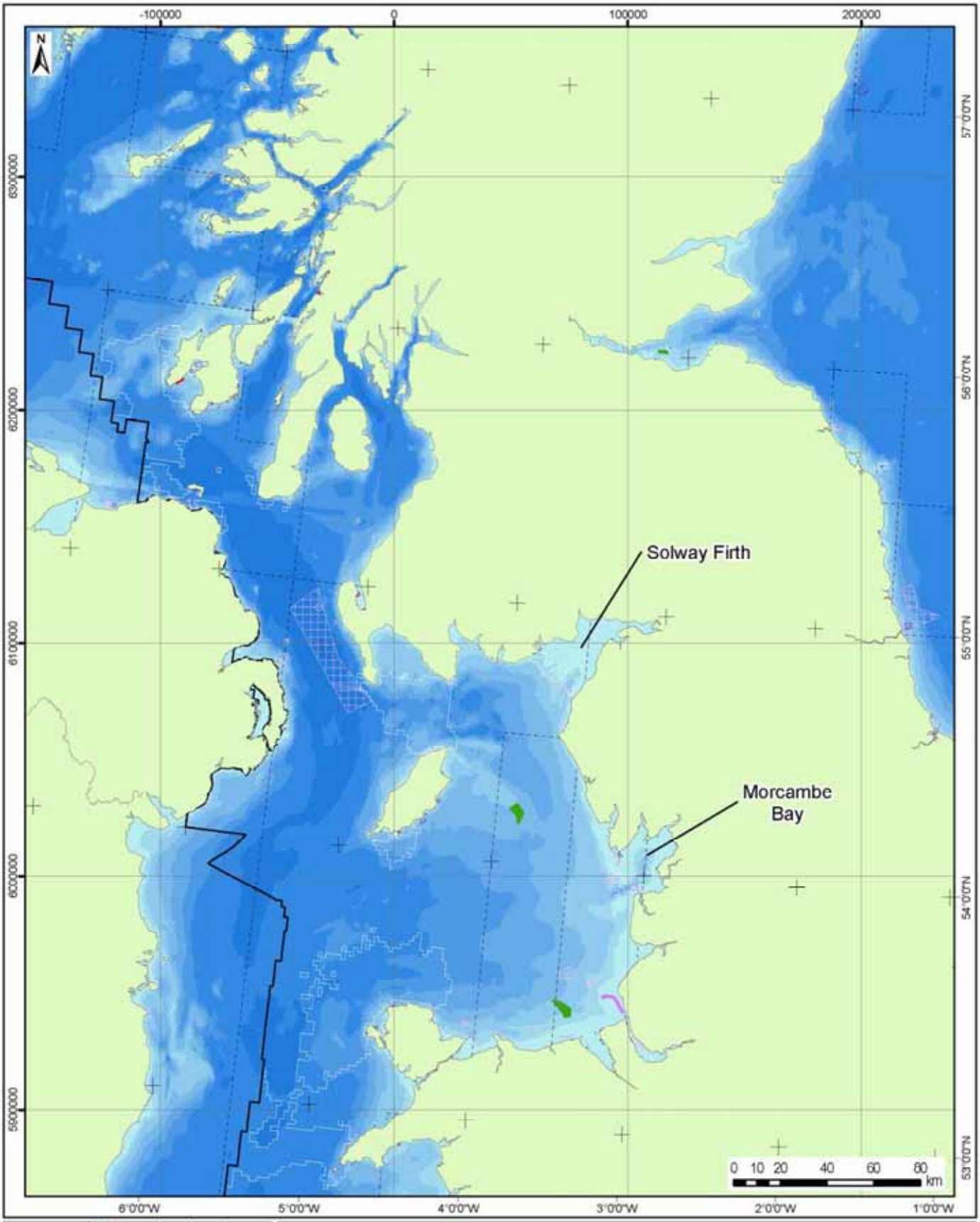
Areas Excluded - West

GIS Figure 37



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Activities_W.mxd			
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- Study Area
- Data Extent
- AOI
- Anchorage Area
- Disposal Site
- Fish Farm
- Maintenance Dredging
- Aggregate Licence Area

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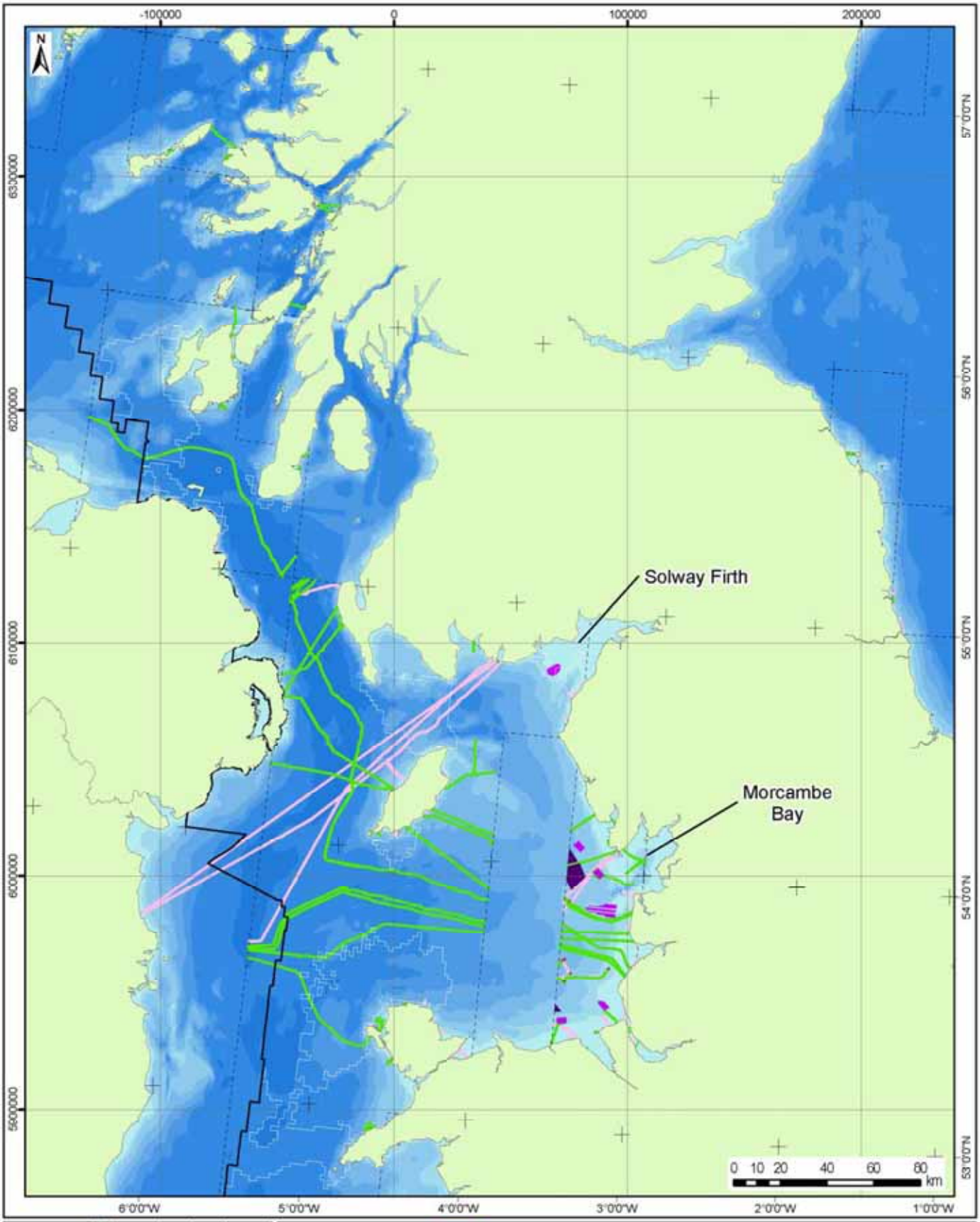
MSP Exclusion Constraints: Activities - West

GIS Figure 38



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Energy_W.mxd			
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- Study Area
- Data Extent
- AOI
- Windfarm (Round 1)
- Windfarm (Round 2)
- Cable
- Pipeline
- Oil & Gas Infrastucture Including Wells

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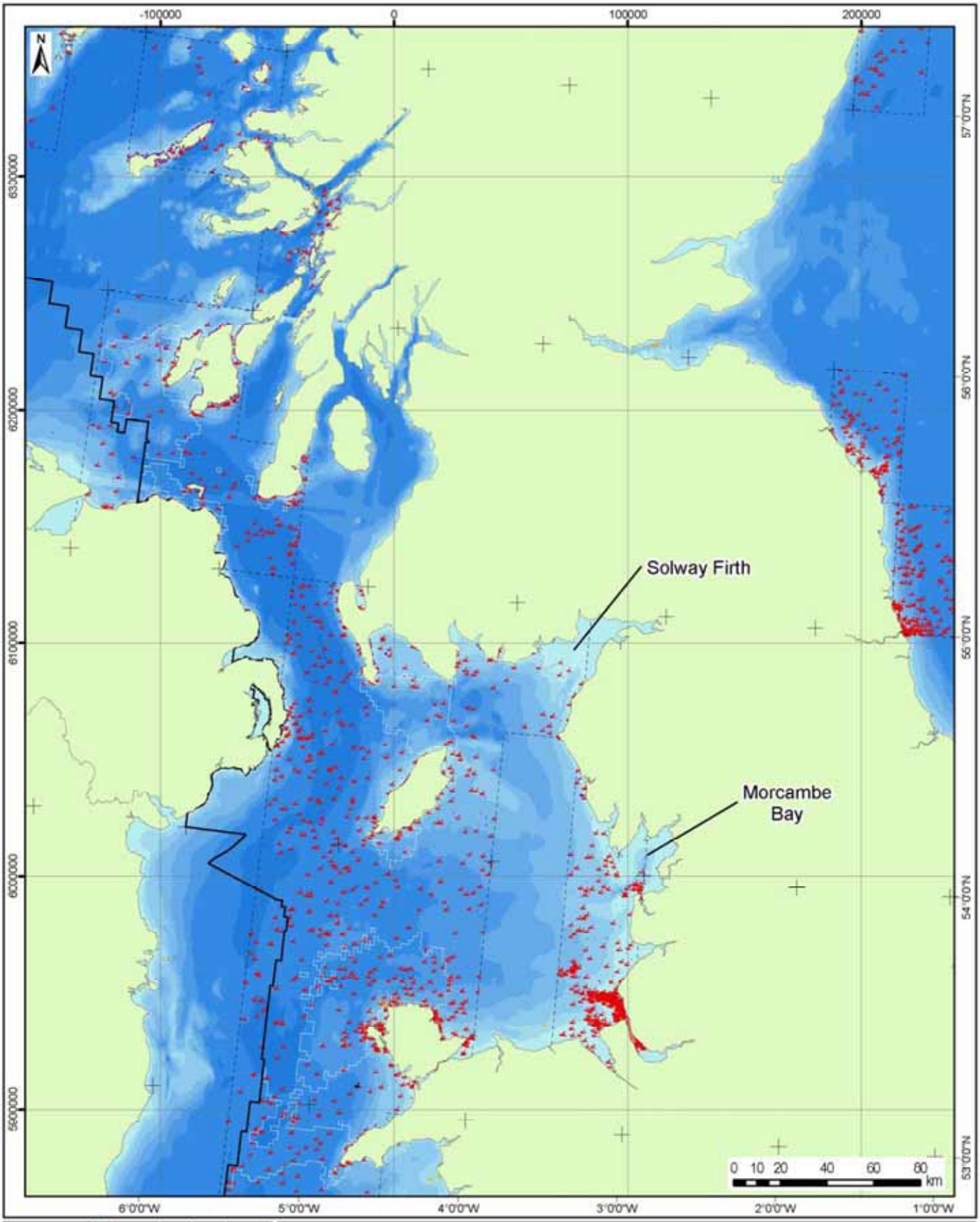
MSP Exclusion Constraints: Installations - West

GIS Figure 39



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Obstructions_W.mxd			
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- Study Area
- Data Extent
- AOI
- Wreck
- Military Wreck
- Protected Wreck
- Obstruction

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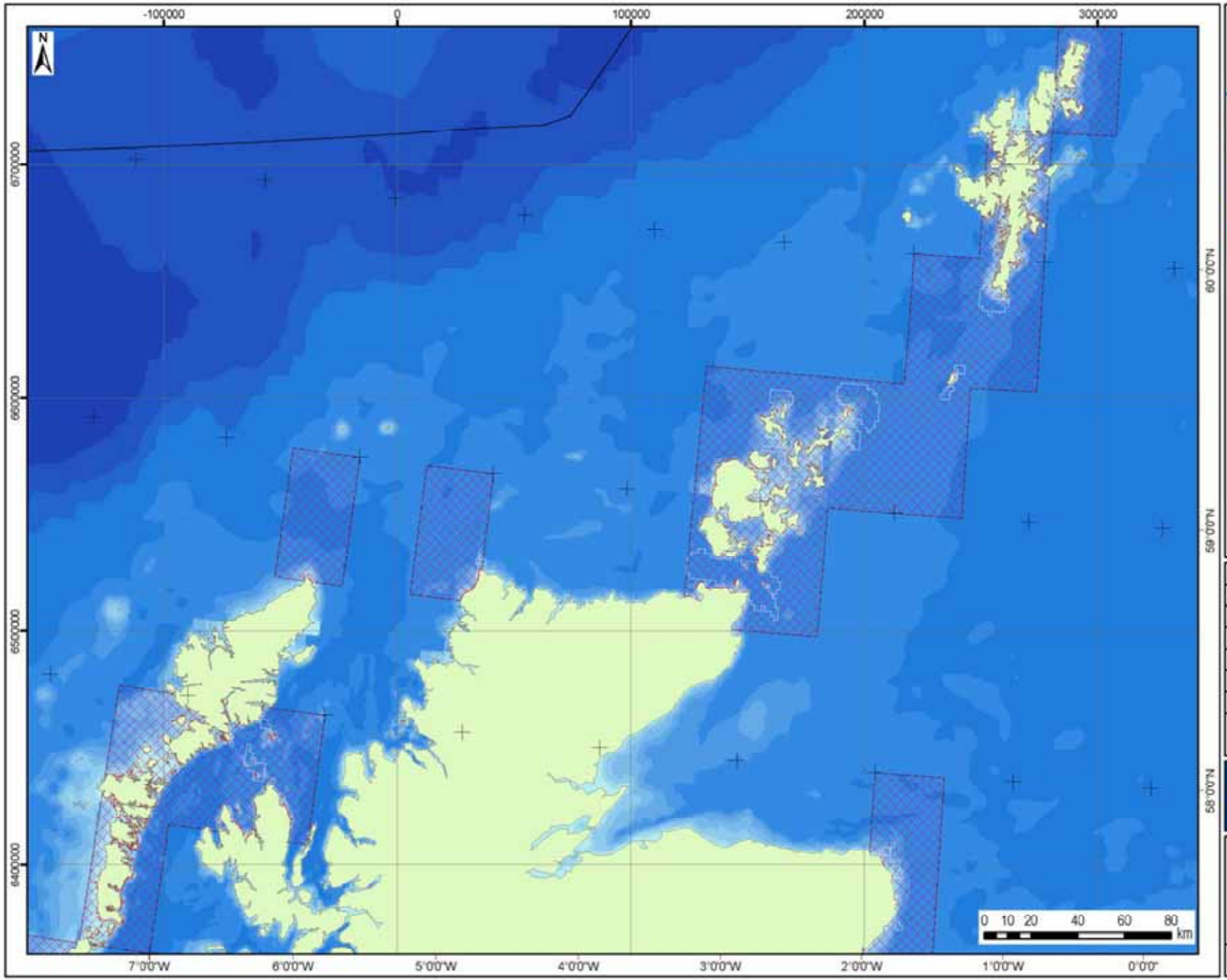
MSP Exclusion Constraints: Obstructions - West

GIS Figure 40



Data Extent
Study Area
AOI
Fish Nursery Area
Fish Spawning Area
Fishing Ground
Shellfish Harvesting

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Biology_N.mxd			
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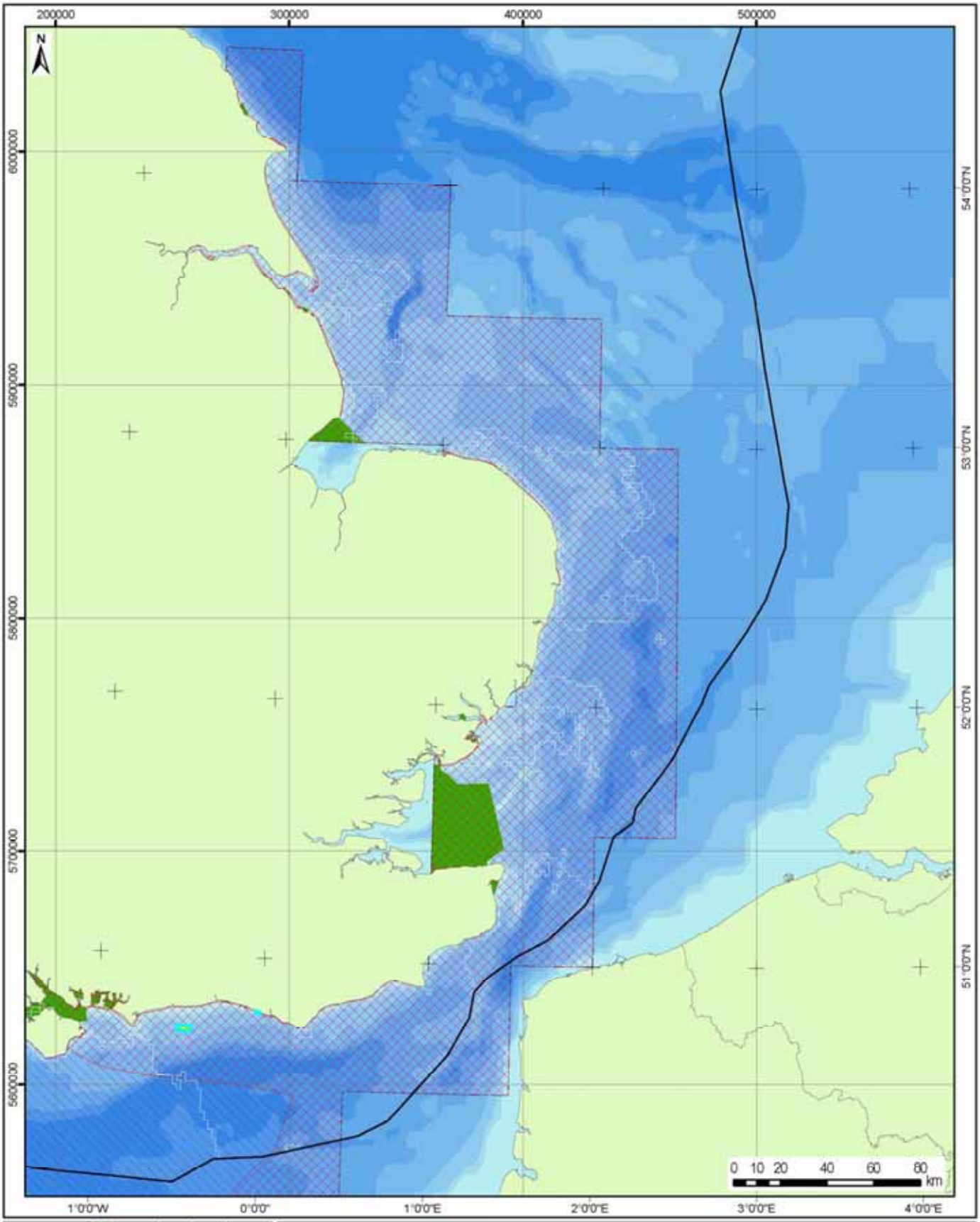
MSP Coexisting Constraints: Biology - North

GIS Figure 41



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Biology_E.mxd			
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- Data Extent
- Study Area
- AOI
- Fish Nursery Area
- Fish Spawning Area
- Fishing Ground
- Shellfish Harvesting

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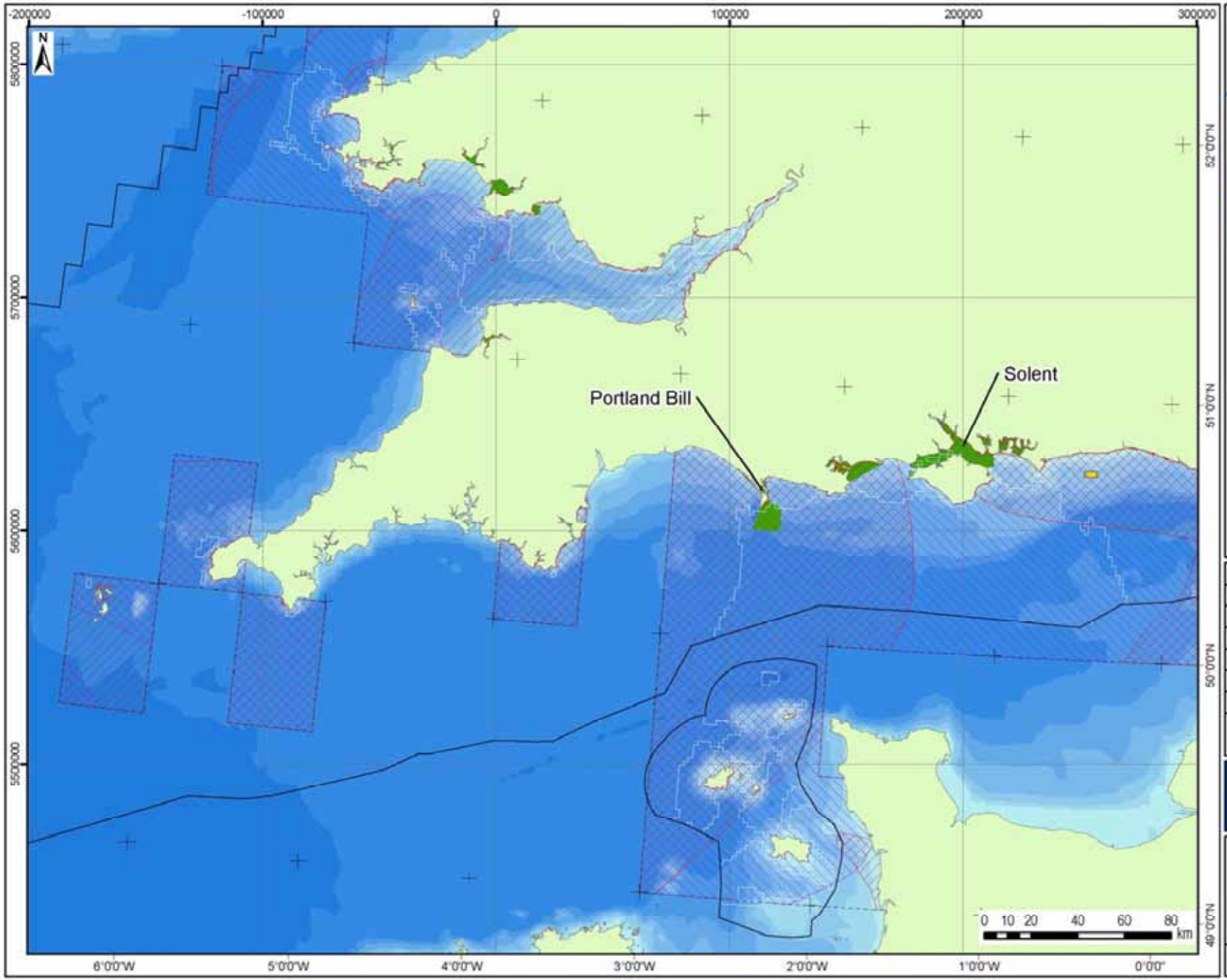
MSP Coexisting Constraints: Biology - East

GIS Figure 42



Data Extent
Study Area
AOI
Fish Nursery Area
Fish Spawning Area
Fishing Ground
Shellfish Harvesting

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Biology_S.mxd			
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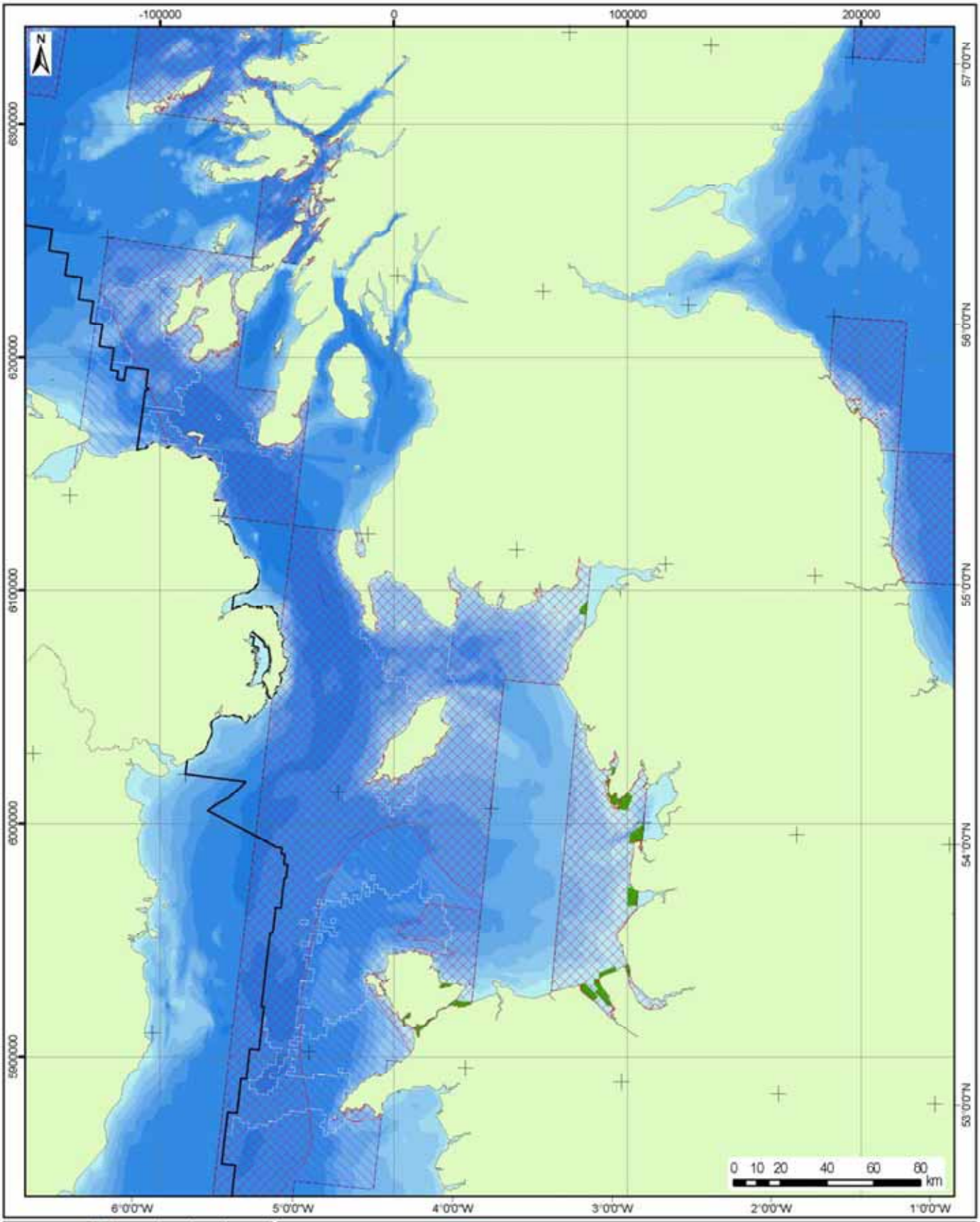
MSP Coexisting Constraints: Biology - South

GIS Figure 43



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Biology_W.mxd			
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Data Extent
Study Area
AOI
Fish Nursery Area
Fish Spawning Area
Fishing Ground
Shellfish Harvesting

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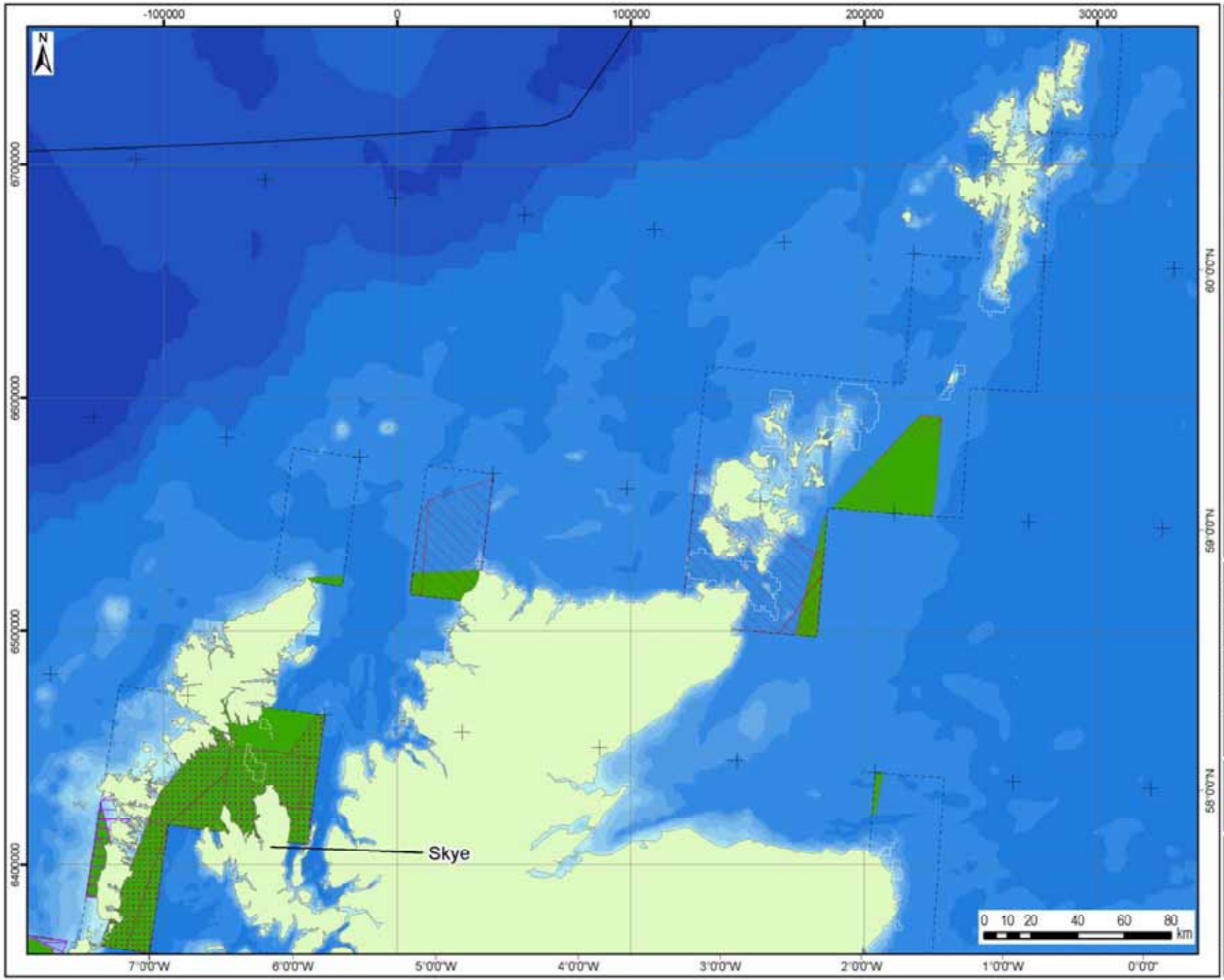
MSP Coexisting Constraints: Biology - West

GIS Figure 44



Data Extent

Study Area

AOI

Military Practice Area

Air Force

RAF

Army

MOD

Navy

Submarine/ Firing Danger

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Military_N.mxd			
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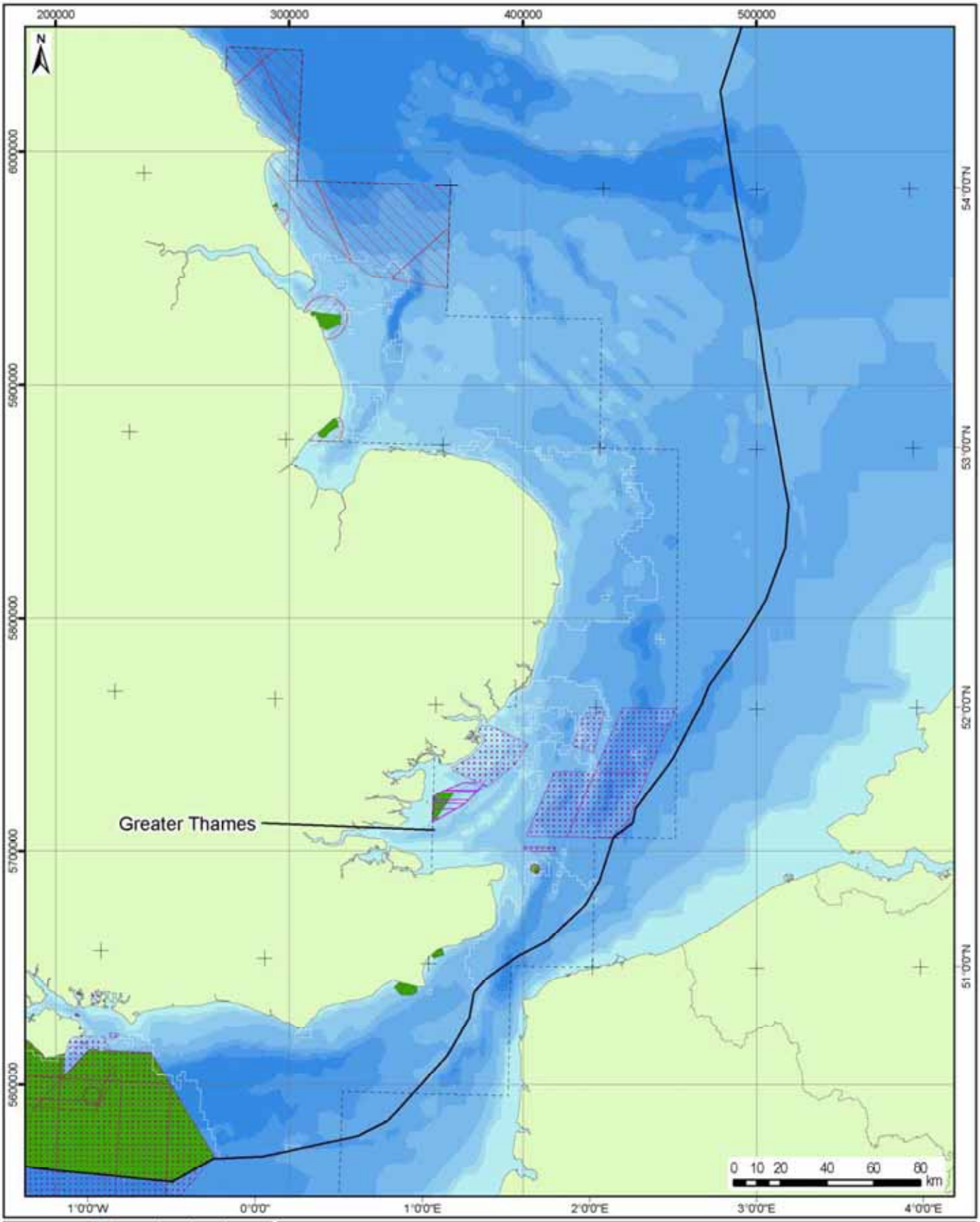
MSP Coexisting Constraints: Military - North

GIS Figure 45



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Military_E.mxd			
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Data Extent
Study Area
AOI

Military Practice Area
Air Force
RAF
Army
MOD
Navy
Submarine/ Firing Danger

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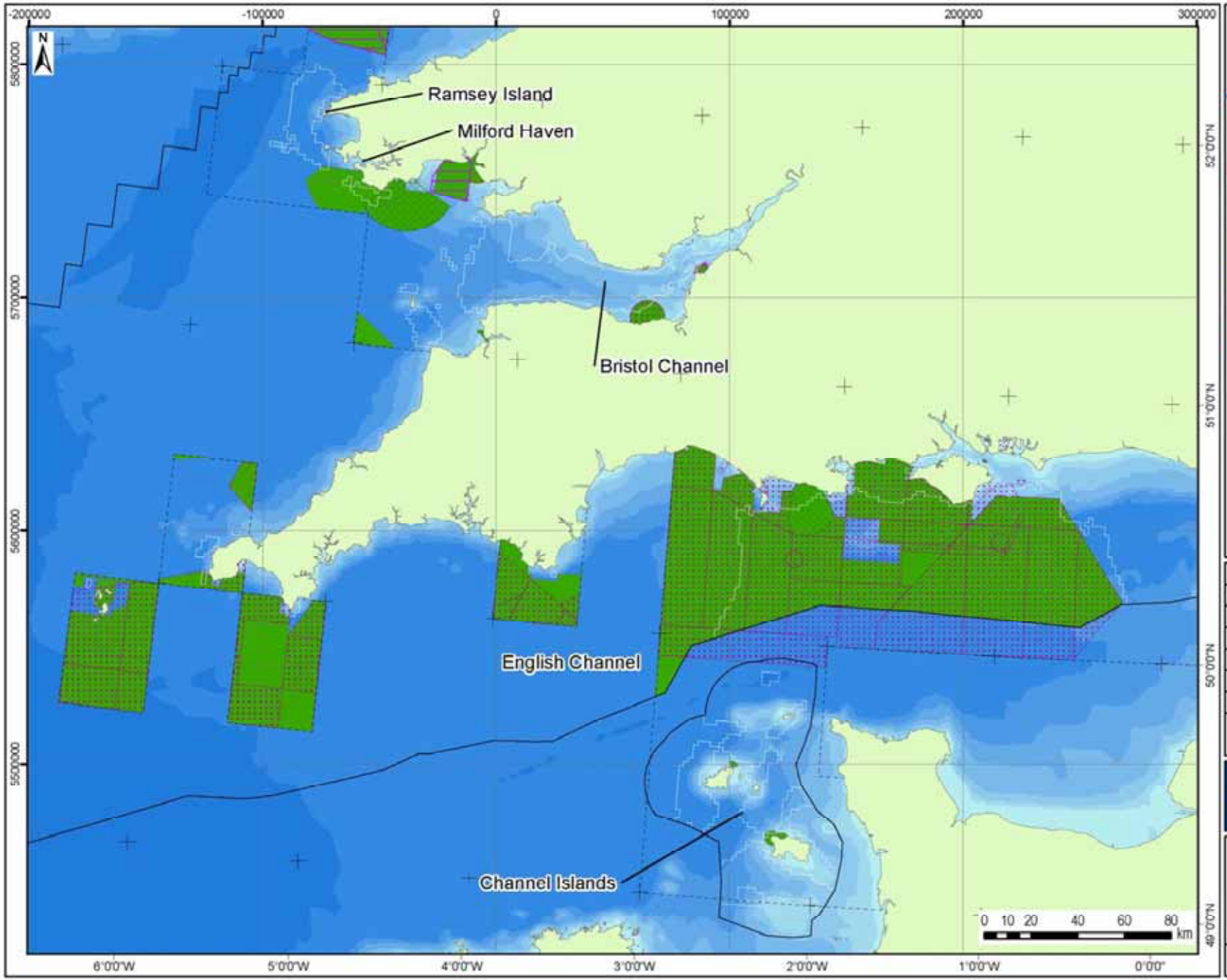
MSP Coexisting Constraints: Military - East

GIS Figure 46



Data Extent

Study Area

AOI

Military Practice Area

Air Force

RAF

Army

MOD

Navy

Submarine/
Firing Danger

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Military_S.mxd			
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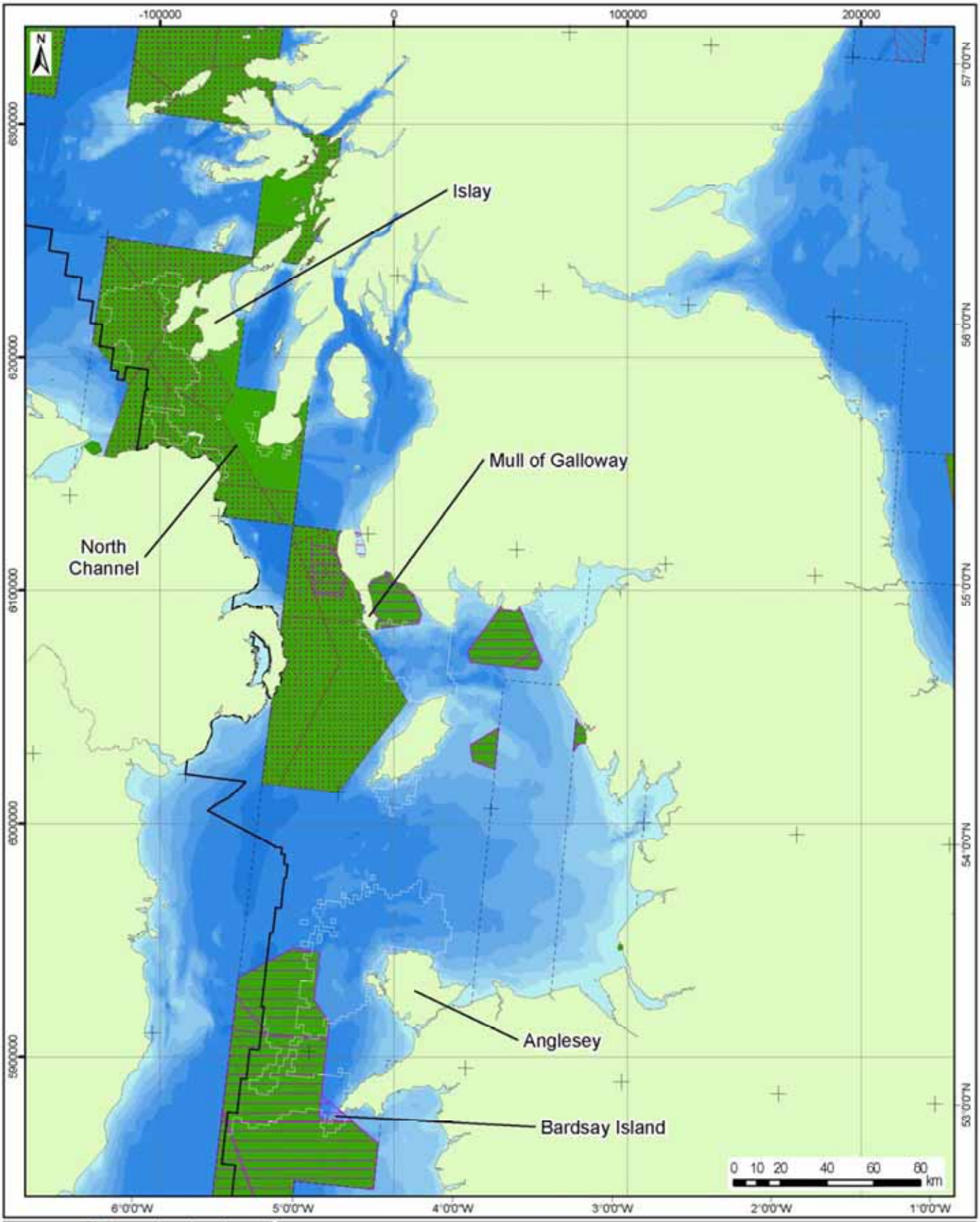
MSP Coexisting Constraints: Military - South

GIS Figure 47



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Military_W.mxd			
Produced by ABPmer Ltd			

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Data Extent
Study Area
AOI

Military Practice Area
Air Force
RAF
Army
MOD
Navy
Submarine/ Firing Danger

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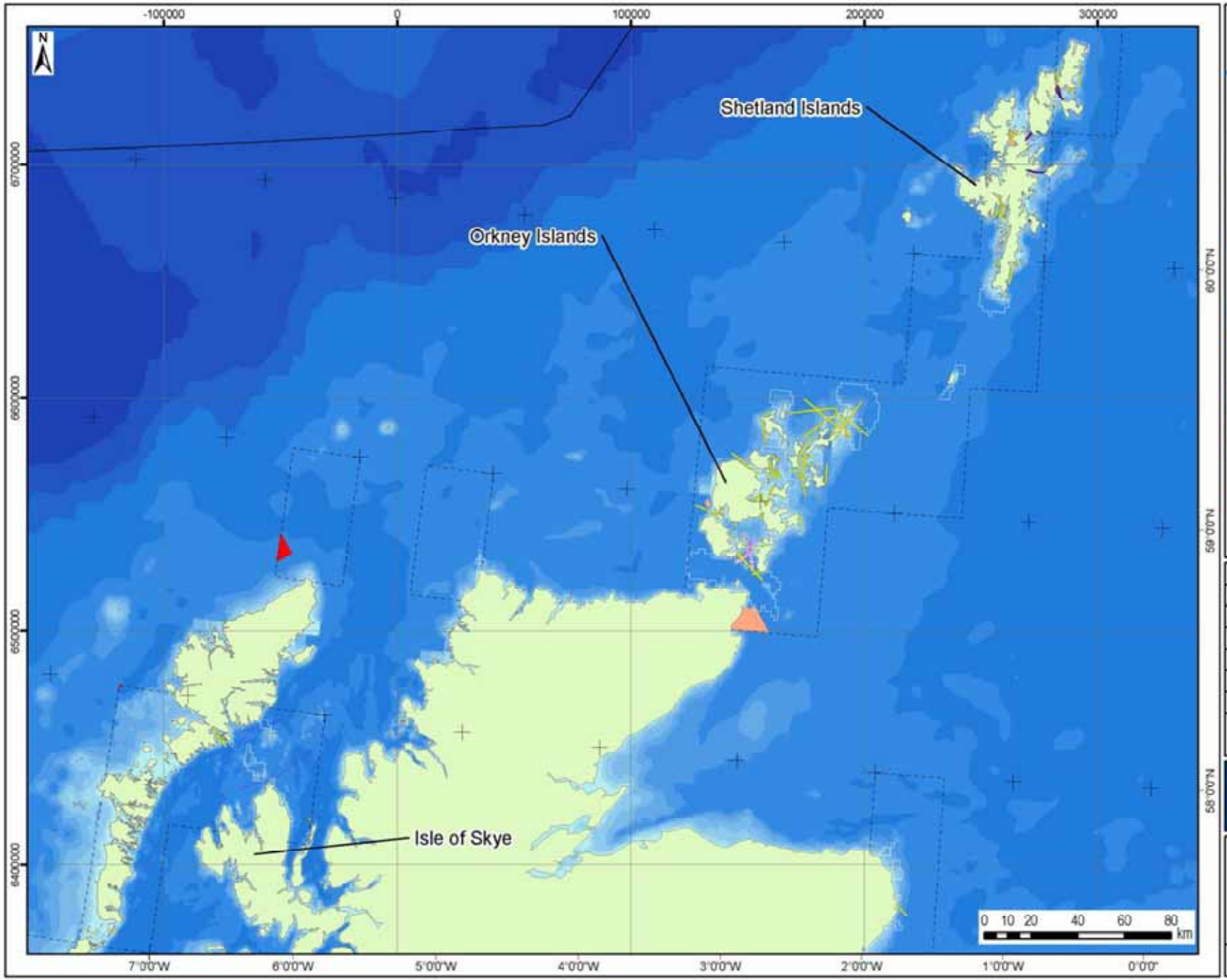
MSP Coexisting Constraints: Military - West

GIS Figure 48



Data Extent
Study Area
AOI
Deep Water Commercial Shipping
Ferry Route
Navigation Line
Recommended Track
Traffic Separation Line
Deep Water Commercial Shipping
Fairway
Ferry Route
Recommended Traffic Lane
Restricted Area
Traffic Separation Lane
Traffic Separation Zone
Hydro-carbon Field
Gas Pocket

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Navigation_N.mxd			
Produced by ABPmer Ltd			

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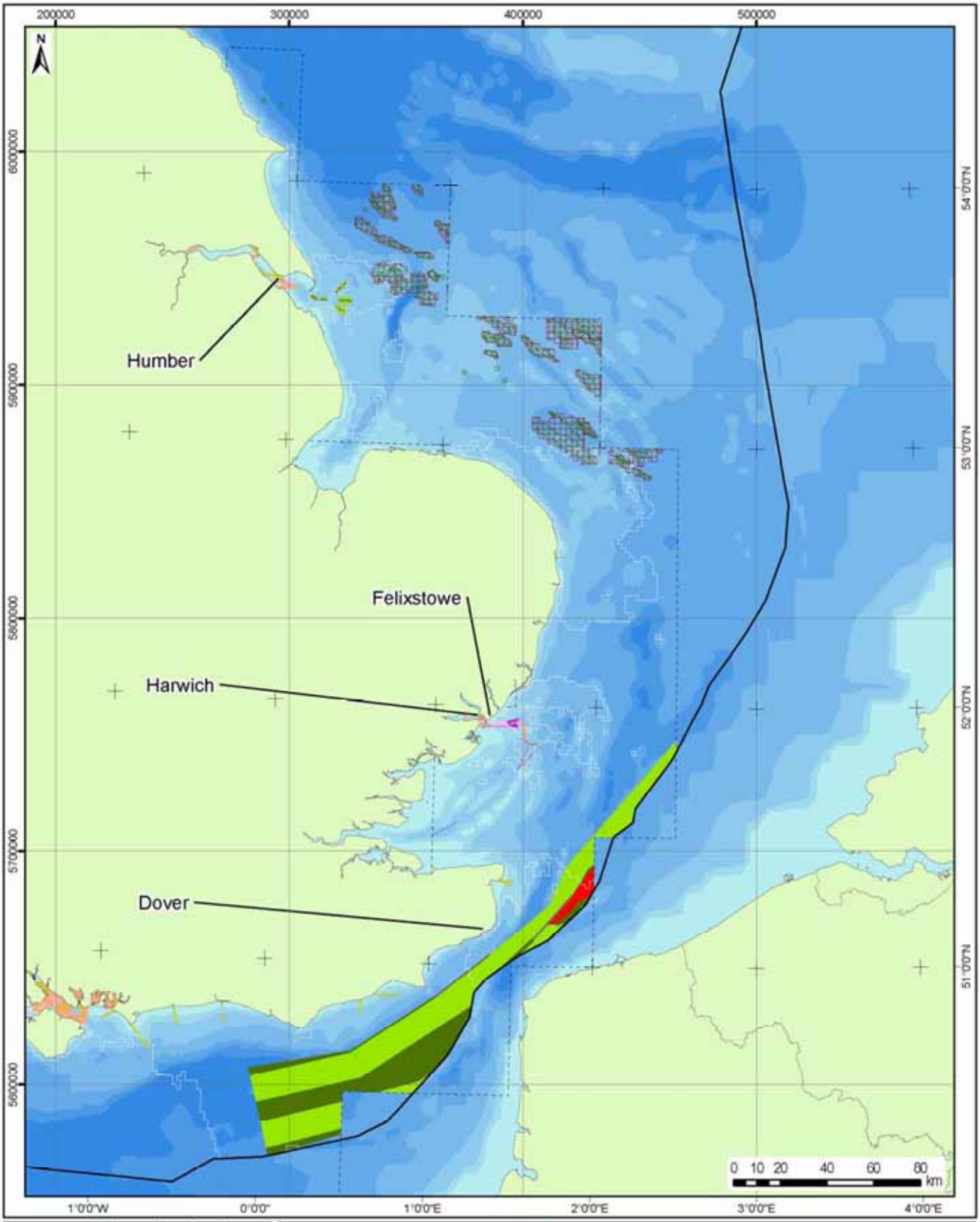
MSP Coexisting Constraints: Navigation and Energy Resources - North

GIS Figure 49



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Navigation_E.mxd			
Produced by ABPmer Ltd			

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- Data Extent
- Study Area
- AOI
- Deep Water Commercial Shipping
- Ferry Route
- Navigation Line
- Recommended Track
- Traffic Seperation Line
- Deep Water Commercial Shipping
- Fairway
- Ferry Route
- Recommended Traffic Lane
- Restricted Area
- Traffic Seperation Scheme Lane
- Traffic Seperation Zone
- Hydro-carbon Field
- Gas Pocket

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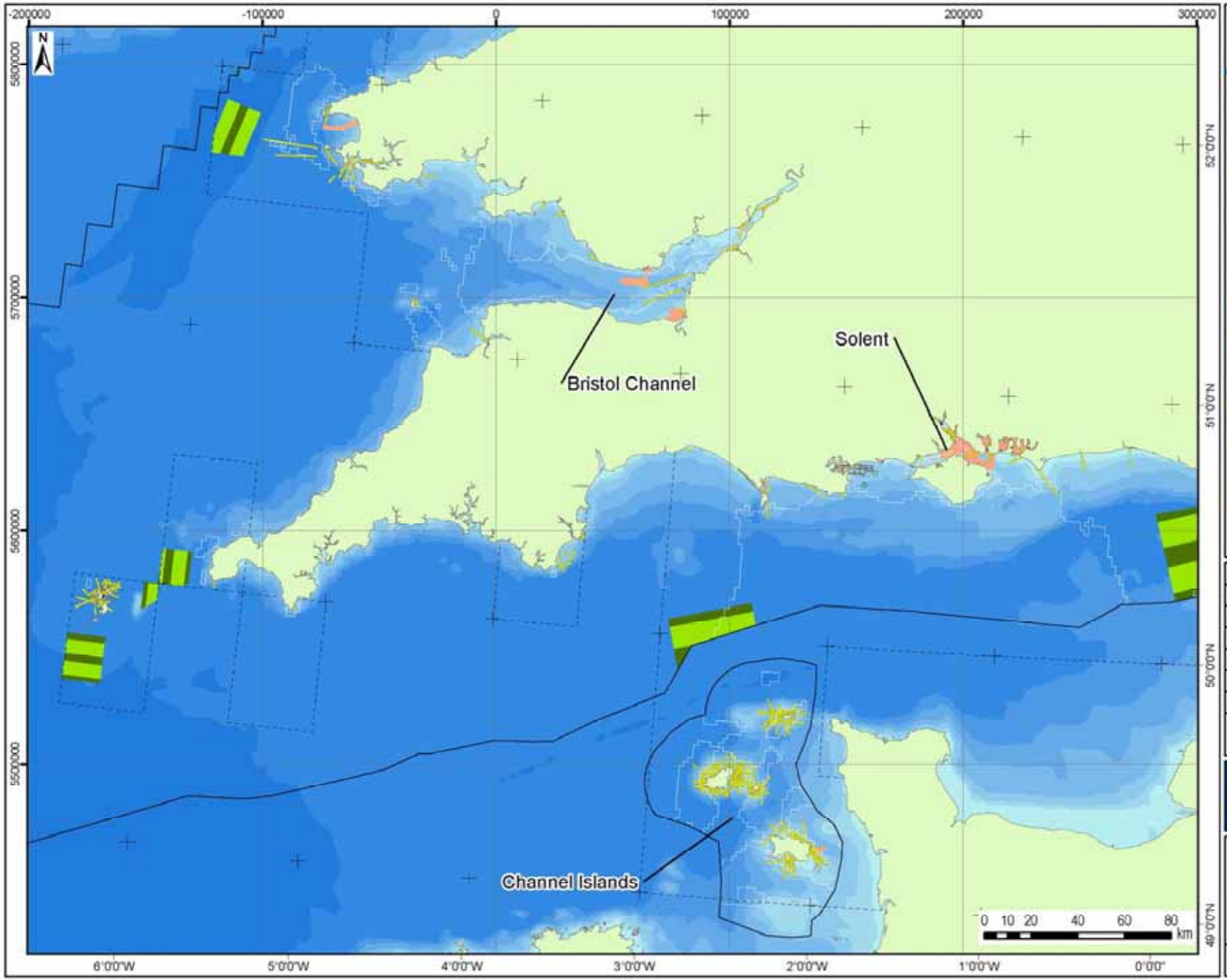
MSP Coexisting Constraints: Navigation and Energy Resources - East

GIS Figure 50



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
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Reference			
3671 - Fig_Navigation_S.mxd			
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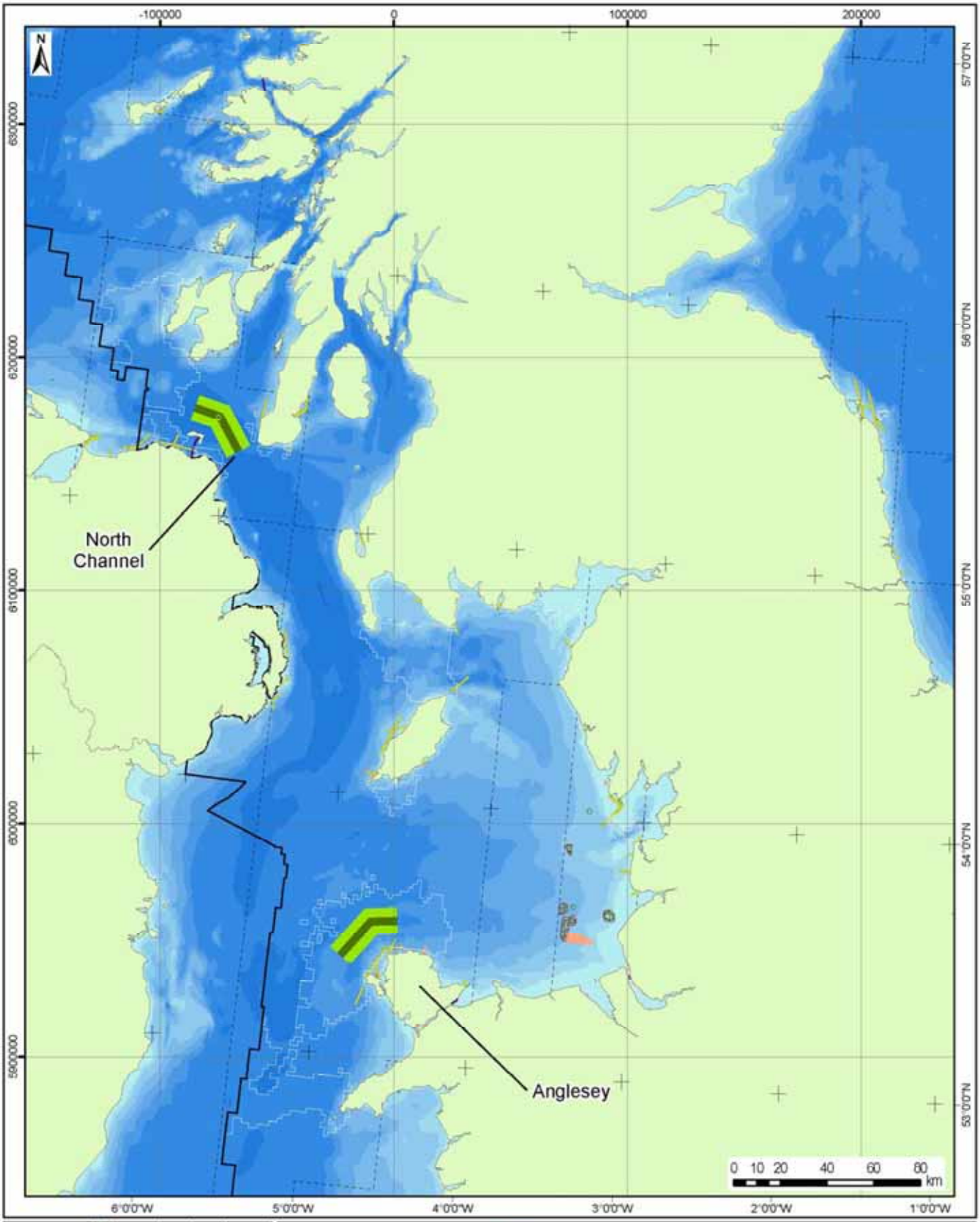
MSP Coexisting Constraints: Navigation and Energy Resources - South

GIS Figure 51



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Navigation_W.mxd			
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- Data Extent
- Study Area
- AOI
- Deep Water Commercial Shipping
- Ferry Route
- Navigation Line
- Recommended Track
- Traffic Seperation Line
- Deep Water Commercial Shipping
- Fairway
- Ferry Route
- Recommended Traffic Lane
- Restricted Area
- Traffic Seperation Scheme Lane
- Traffic Seperation Zone
- Hydro-carbon Field
- Gas Pocket

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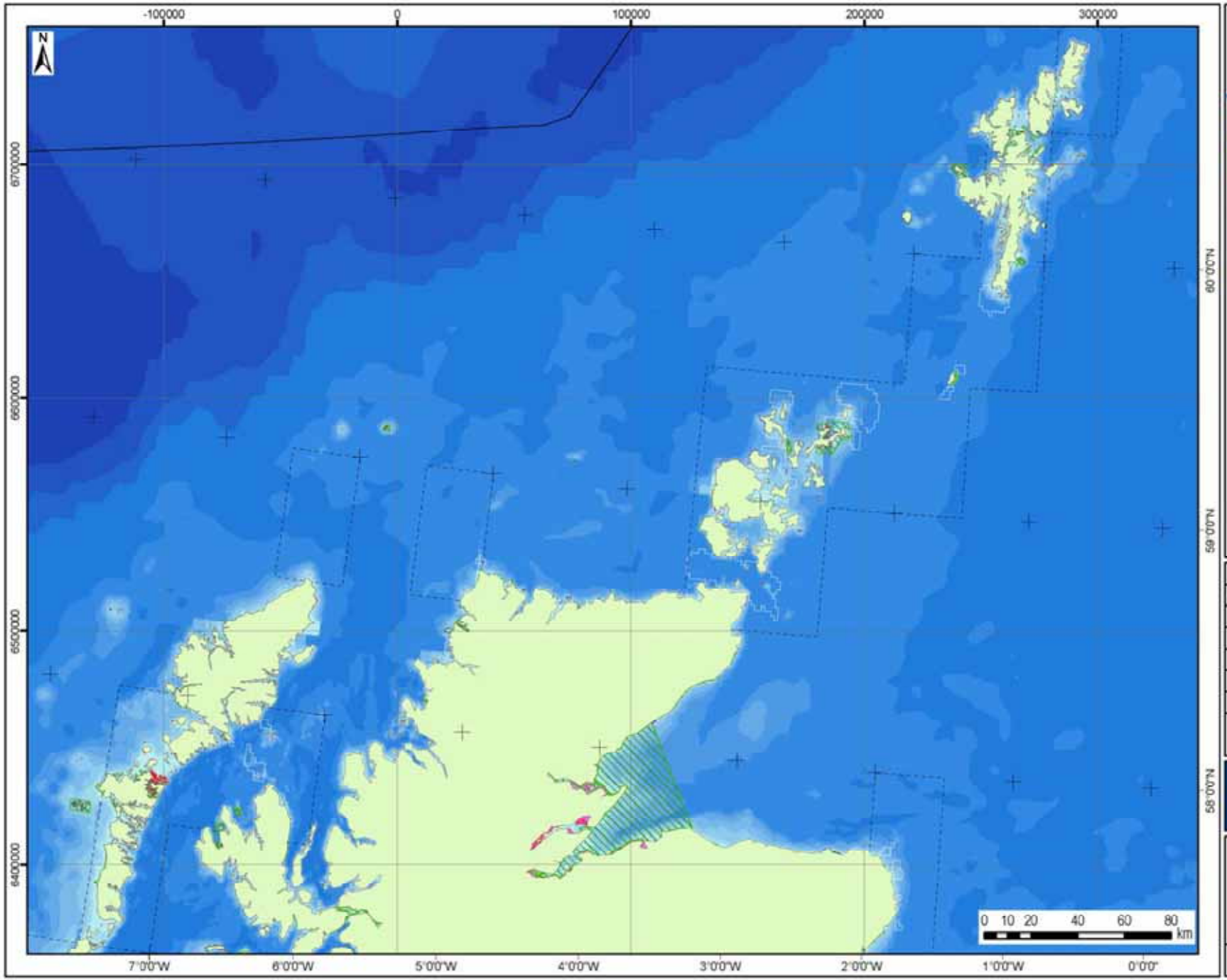
MSP Coexisting Constraints: Navigation and Energy Resources - West

GIS Figure 52



Data Extent
Study Area
AOI
Marine Nature Reserve
SAC
Ramsar
SSSI
SPA

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Designation_N.mxd			
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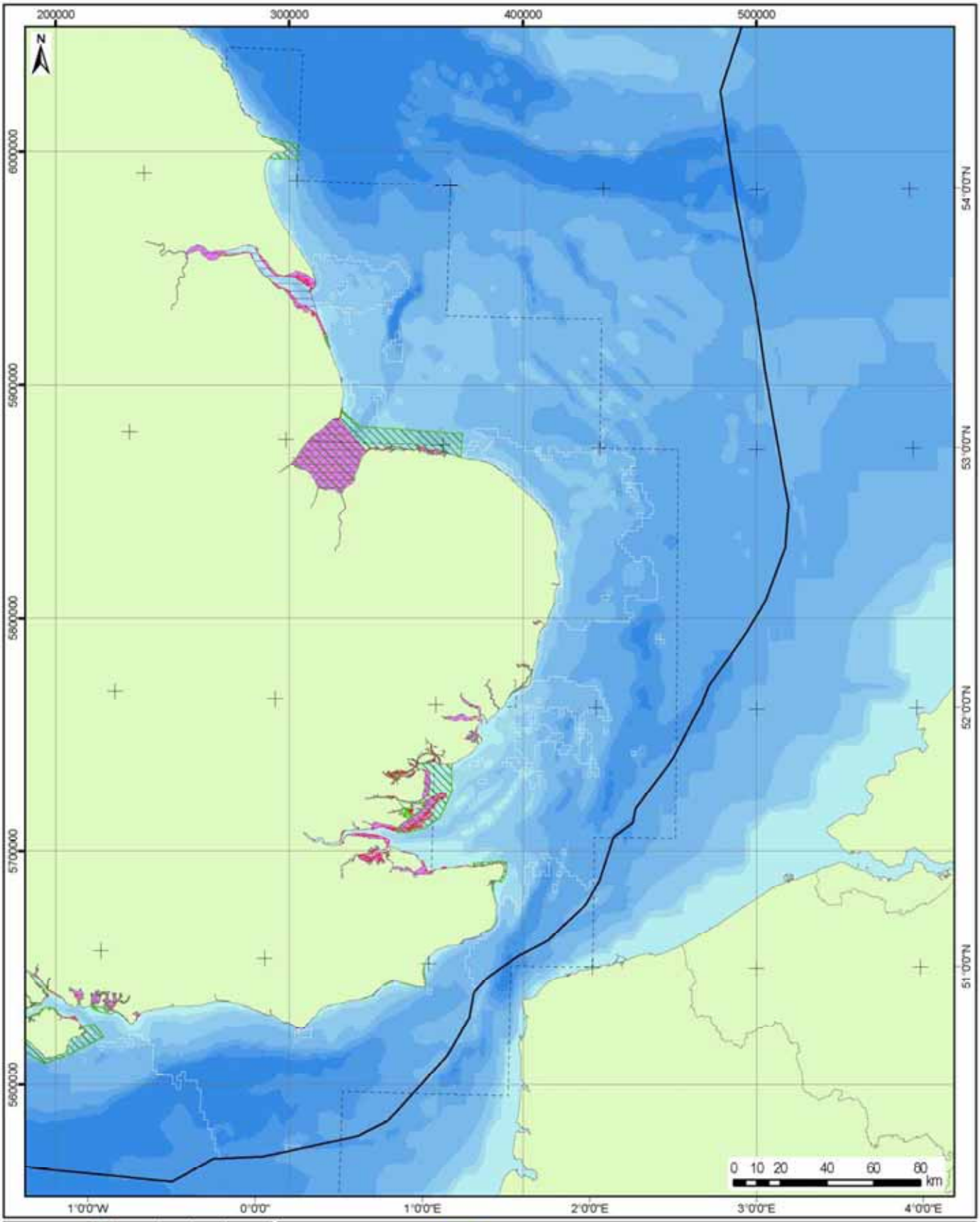
MSP Coexisting Constraints: Environmental Designations - North

GIS Figure 53



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April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Designation_E.mxd			
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- Data Extent
- Study Area
- AOI
- Marine Nature Reserve
- SAC
- Ramsar
- SSSI
- SPA

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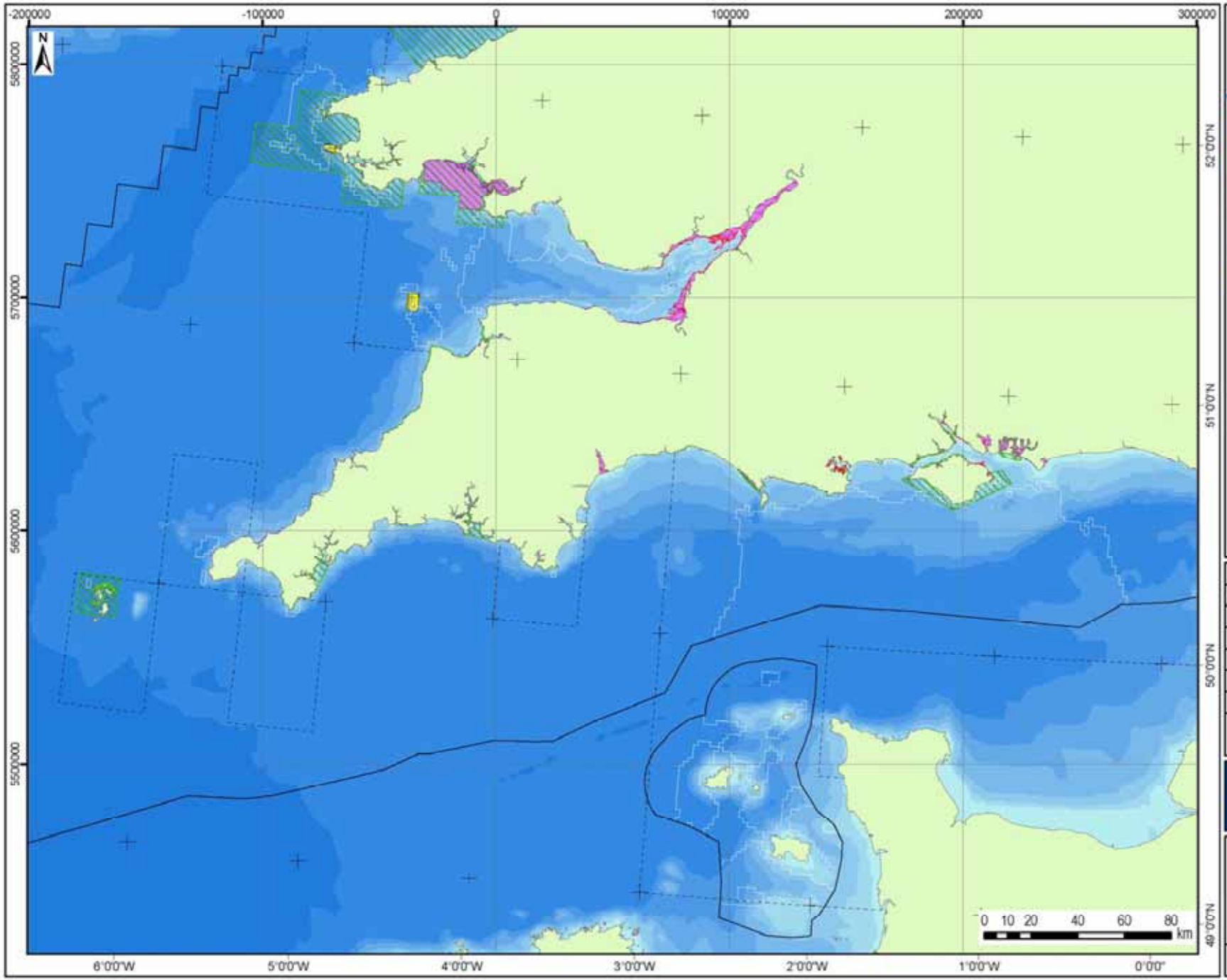
marine environmental research

MSP Coexisting Constraints:
Environmental Designations - East

GIS Figure 54



Data Extent
Study Area
AOI
Marine Nature Reserve
SAC
Ramsar
SSSI
SPA

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Designation_S.mxd			
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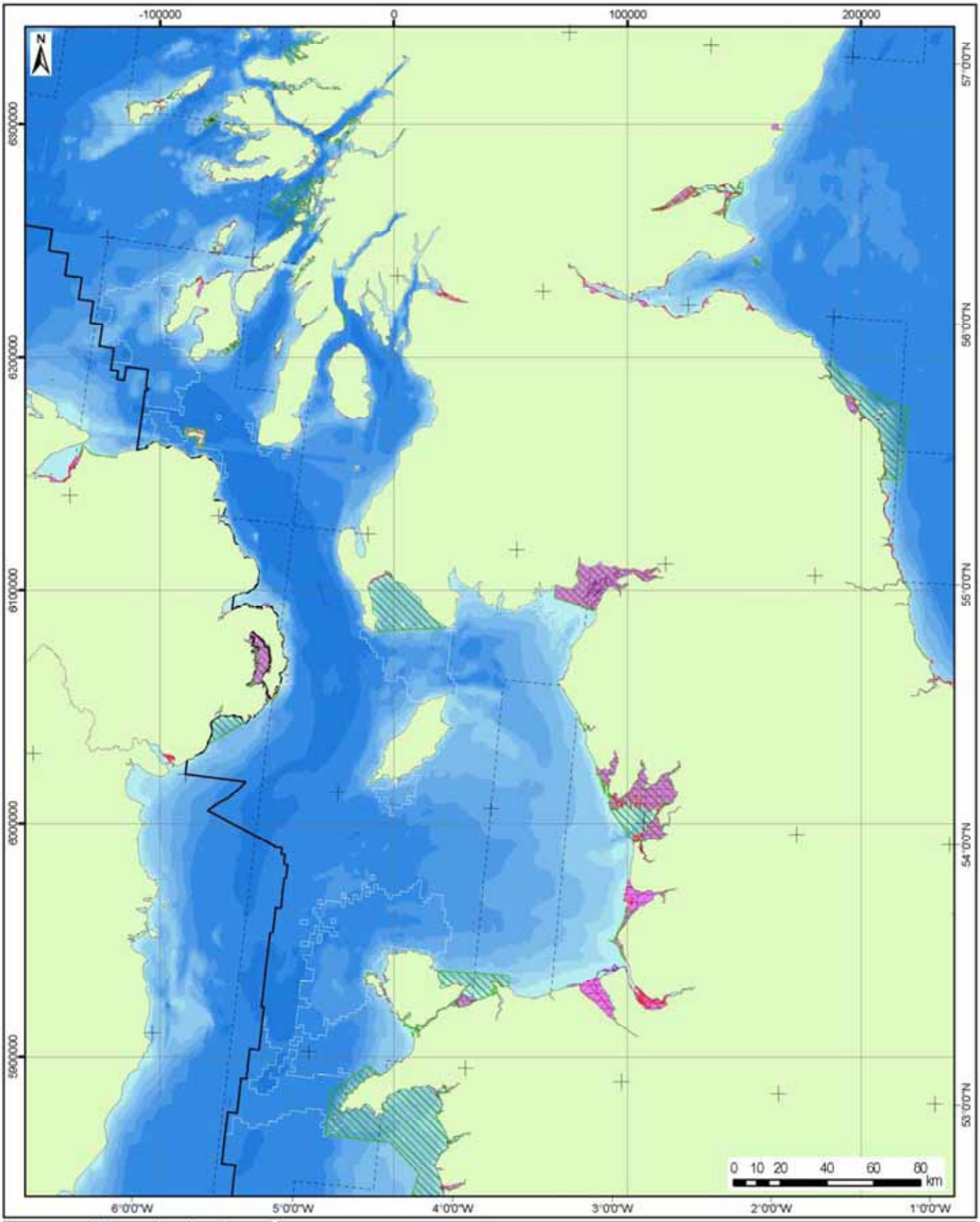
MSP Coexisting Constraints: Environmental Designations - South

GIS Figure 55



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April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Designation_W.mxd			
Produced by ABPmer Ltd			

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Data Extent
Study Area
AOI
Marine Nature Reserve
SAC
Ramsar
SSSI
SPA

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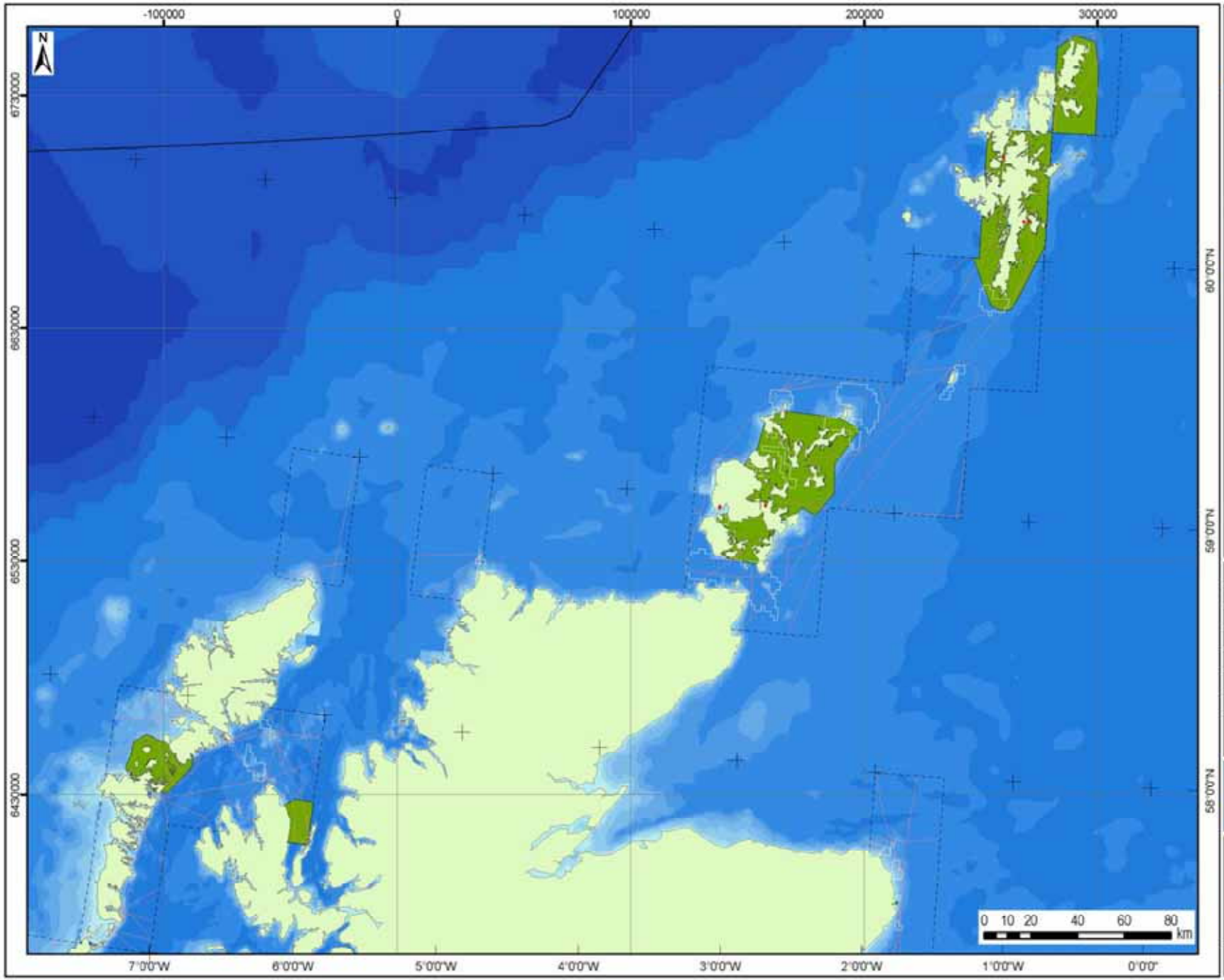
MSP Coexisting Constraints: Environmental Designations - West

GIS Figure 56



Data Extent
Study Area
Area Of Interest
Clubs
Marinas
Training Centres
Cruising Route
Racing Area
Sailing Area

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Recreation_N.mxd			
Produced by ABPmer Ltd			

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Source: RYA

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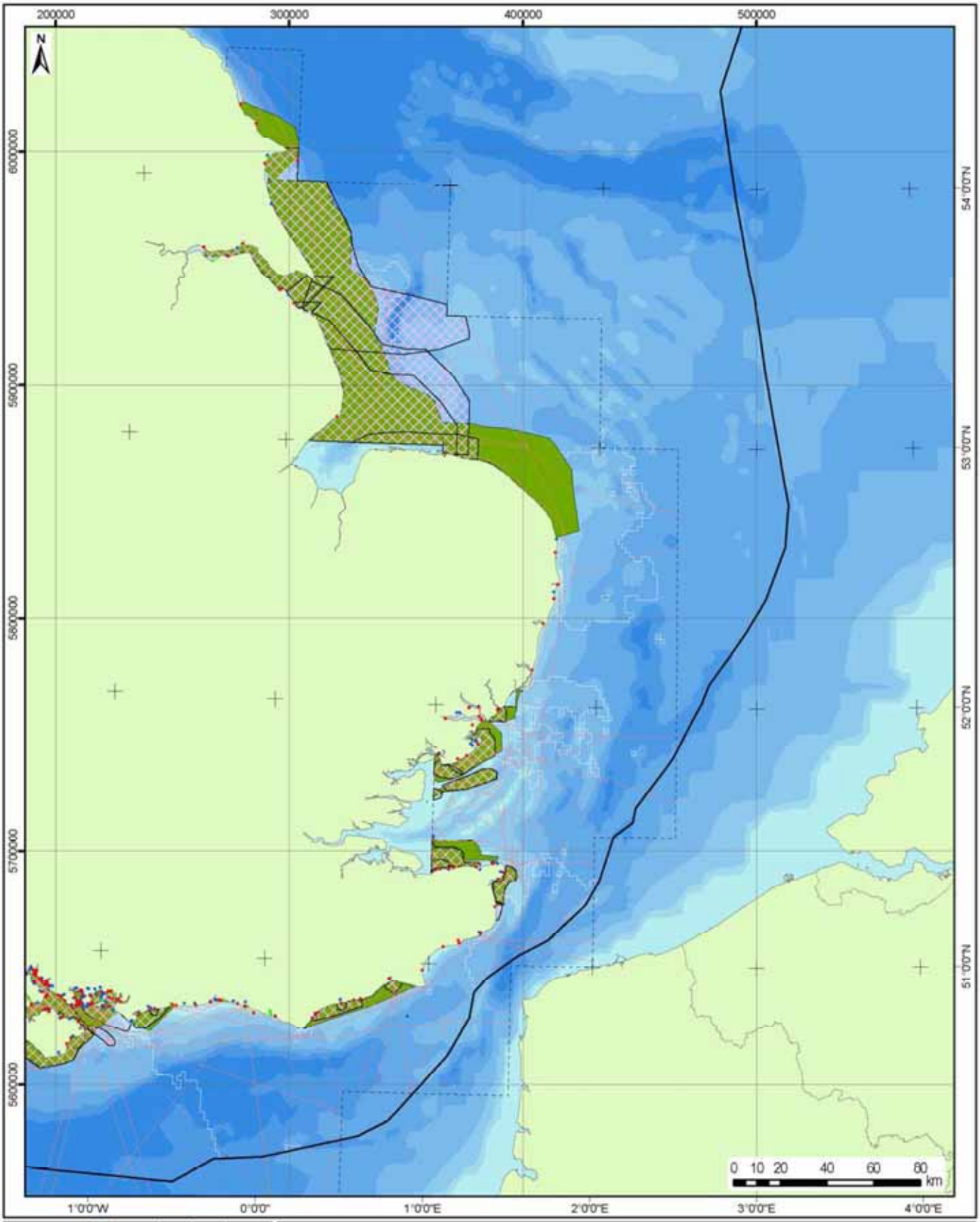
MSP Coexisting Constraints: Recreation - North

GIS Figure 57



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Recreation_E.mxd			
Produced by ABPmer Ltd			

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Source: RYA

Data Extent
Study Area
AOI
Clubs
Marinas
Training Centres
Cruising Routes
Racing Areas
Sailing Areas

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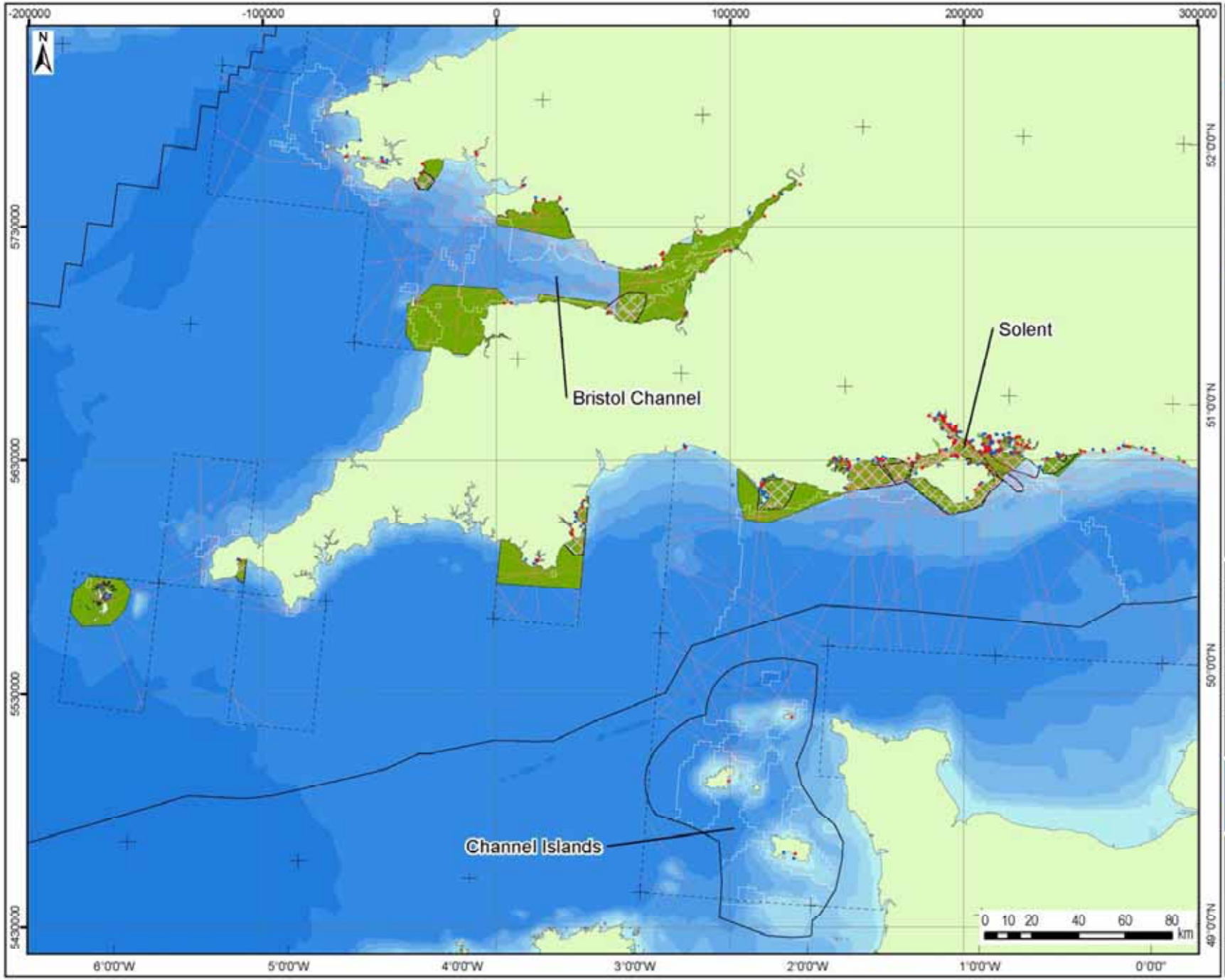
MSP Coexisting Constraints: Recreation - East

GIS Figure 58



Data Extent
Study Area
AOI
Clubs
Marinas
Training Centres
Cruising Routes
Racing Areas
Sailing Areas

Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Recreation_S.mxd			
Produced by ABPmer Ltd			

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Source: RYA

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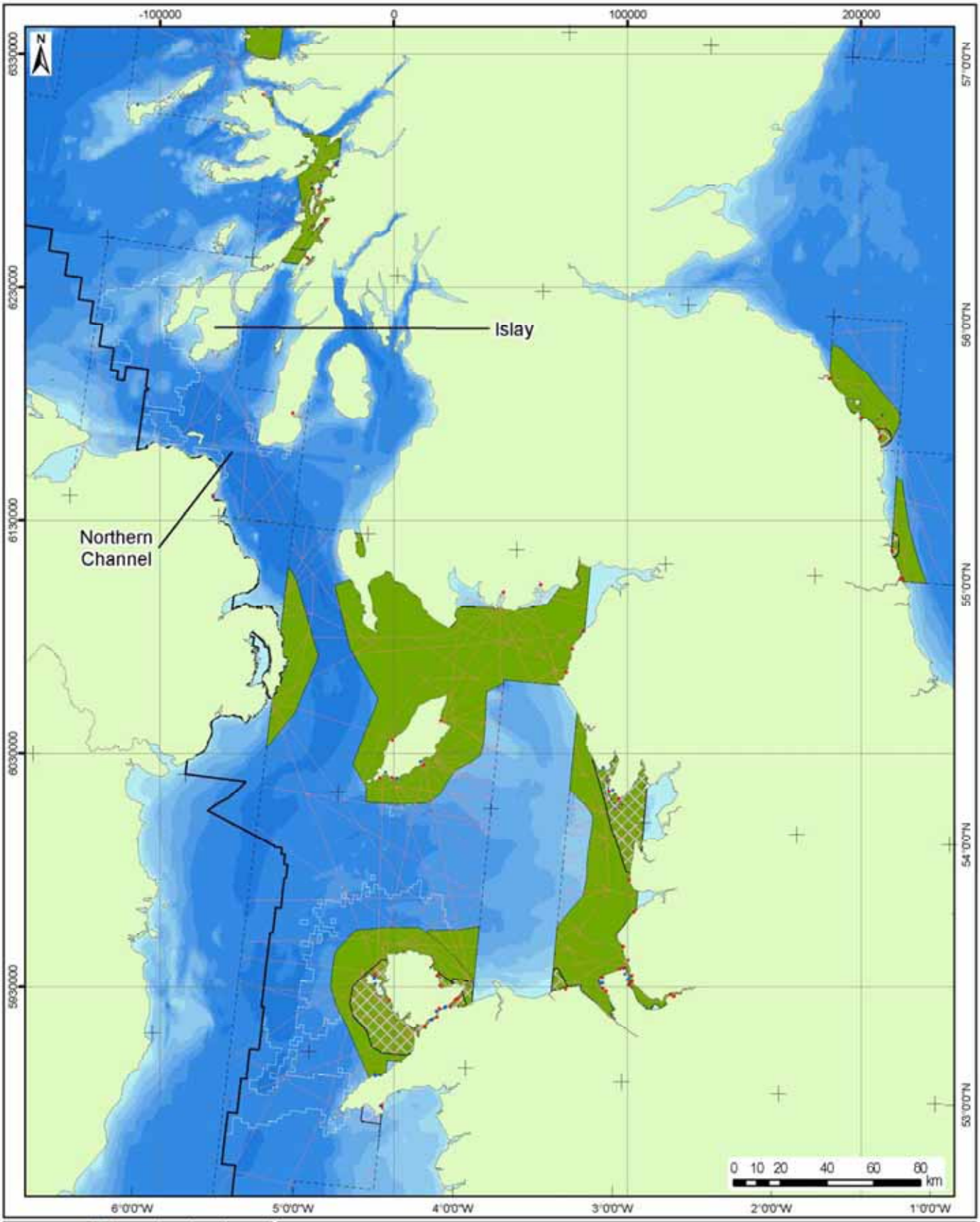
MSP Coexisting Constraints: Recreation - South

GIS Figure 59



Date	By	Size	Version
April 2007	DP	A4	1
Projection		Scale	
WGS84 UTM31N		1:2,300,000	
Reference			
3671 - Fig_Recreation_W.mxd			
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Source: RYA

Data Extent
Study Area
AOI
Clubs
Marinas
Training Centres
Cruising Routes
Racing Areas
Sailing Areas

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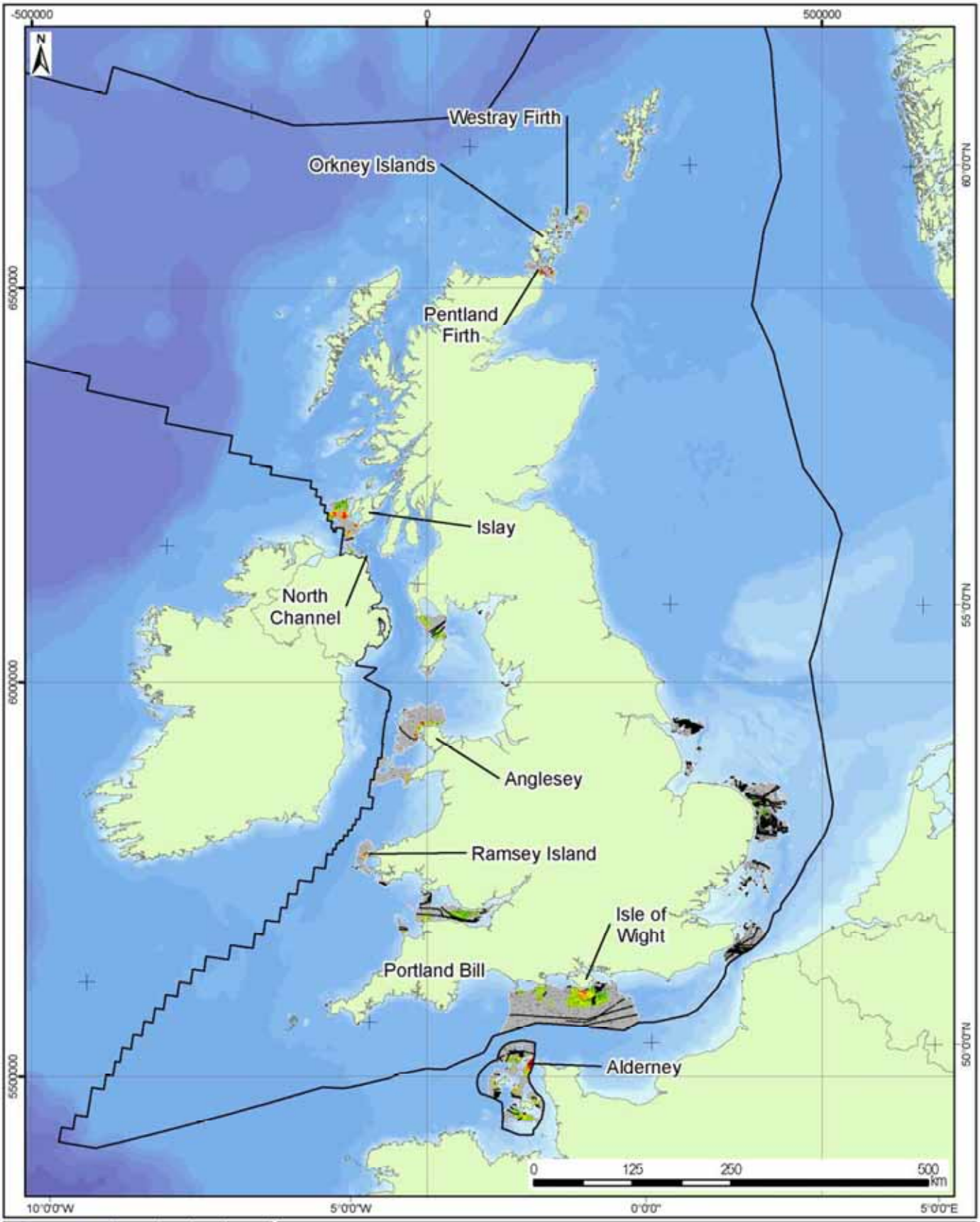
MSP Coexisting Constraints: Recreation - West

Figure 60



Date	By	Size	Version
Apr 2007	DP	A4	1
Projection		Scale	
WGS UTM 31N		1:6,800,000	
Reference			
3671 - Figure_PotentialCapABE.mxd			
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Capacity (MW)

5.0 - 7.5
7.5 - 10.0
10.0 - 12.5
12.5 - 15.0
15.0 - 17.5
17.5 - 20.0
20.0 - 22.5
22.5 - 25.0
25.0 - 27.5
27.5 - 30.0

Exclusion

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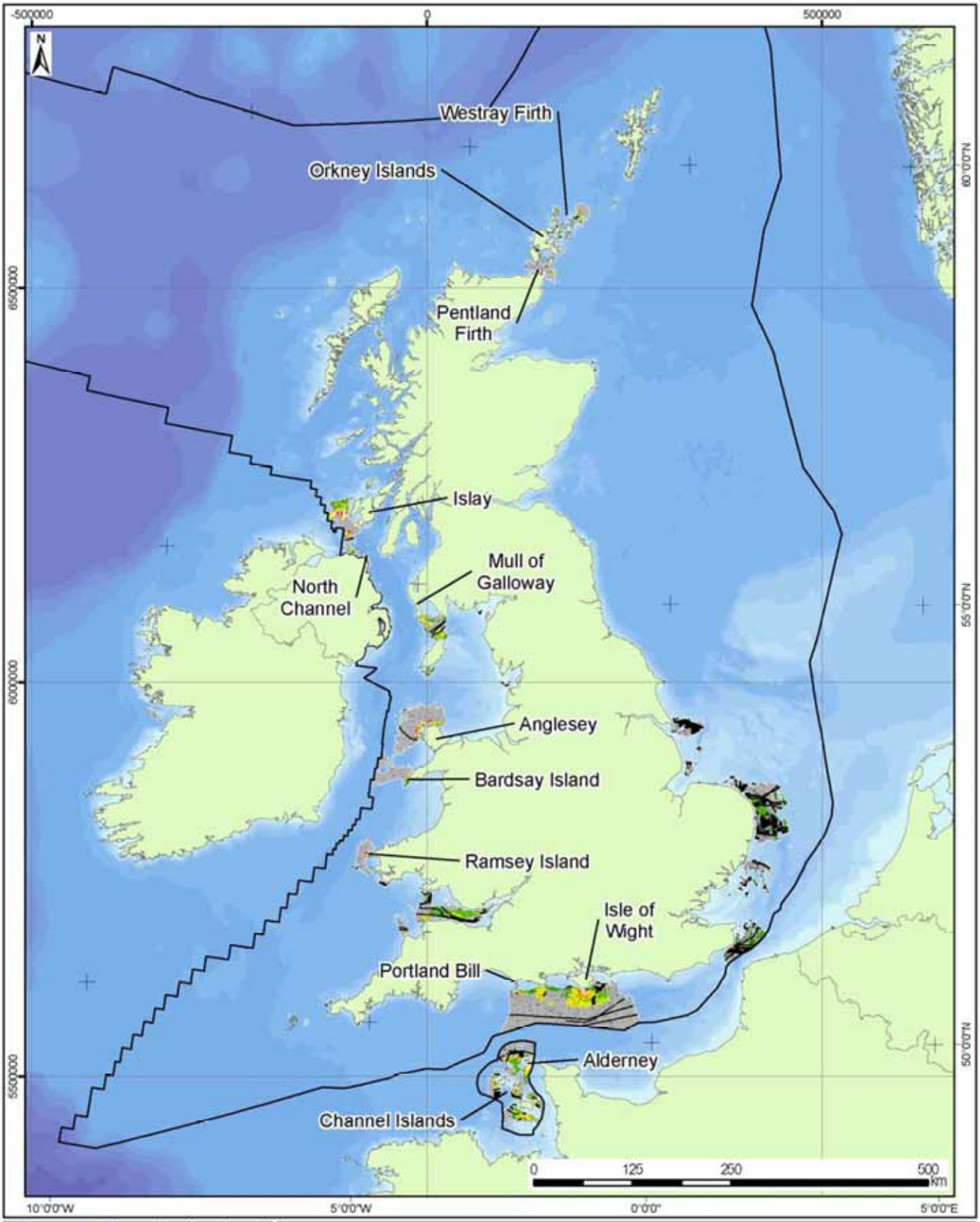
Potential Deployment Capacity per Square km - Groups A, B and E

GIS Figure 61



Date	By	Size	Version
Apr 2007	DP	A4	1
Projection		Scale	
WGS UTM 31N		1:6,800,000	
Reference			
3671 - Figure_PotentialCapC.mxd			
Produced by ABPmer Ltd			

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Capacity (MW)

5.0 - 7.5
7.5 - 10.0
10.0 - 12.5
12.5 - 15.0
15.0 - 17.5
17.5 - 20.0
20.0 - 22.5
22.5 - 25.0
25.0 - 27.5
27.5 - 30.0

Exclusion

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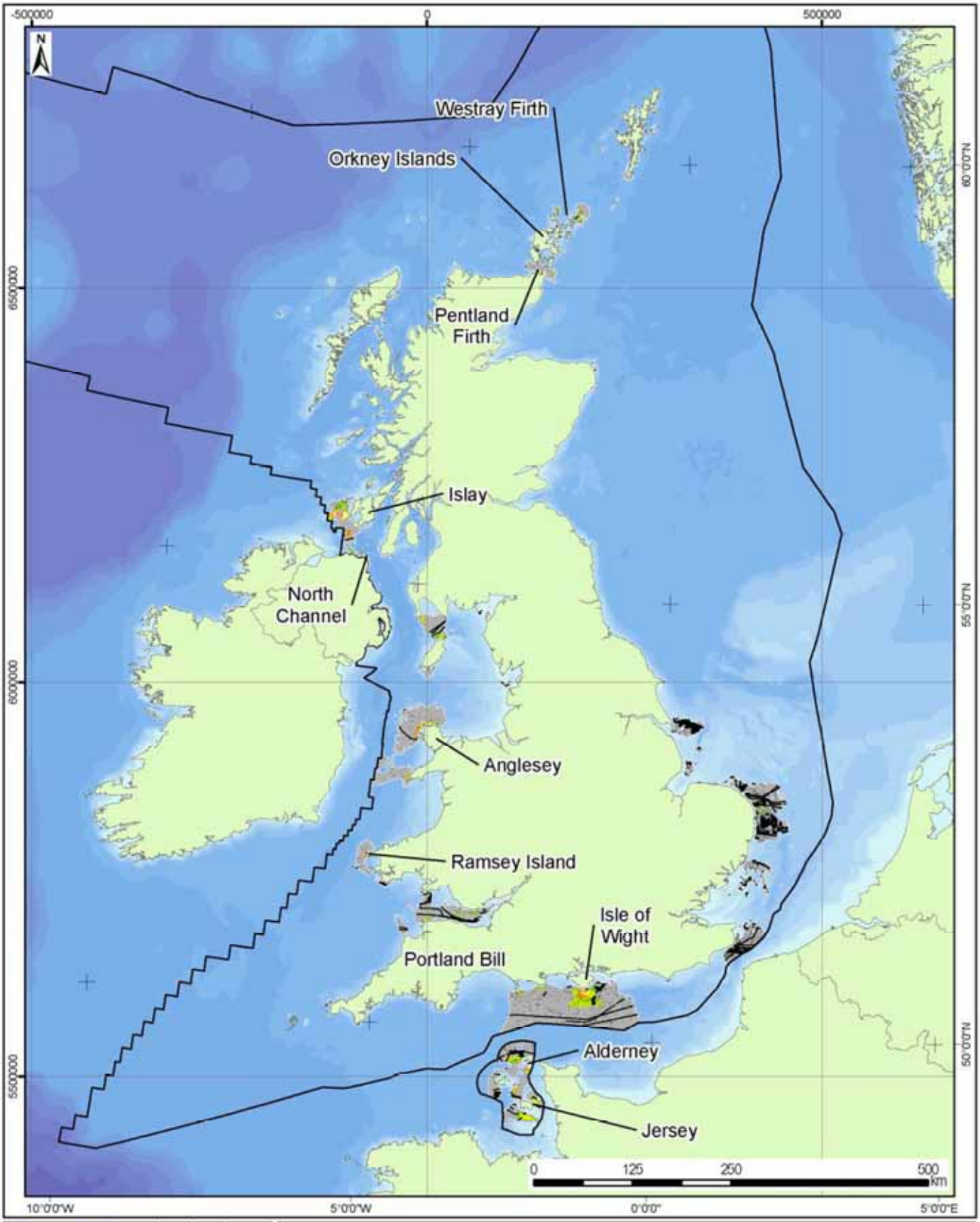
Potential Deployment Capacity per Square km - Group C

GIS
Figure 62



Date	By	Size	Version
Apr 2007	DP	A4	1
Projection		Scale	
WGS UTM 31N		1:6,800,000	
Reference			
3671 - Figure_PotentialCapD.mxd			
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Capacity (MW)

5.0 - 7.5
7.5 - 10.0
10.0 - 12.5
12.5 - 15.0
15.0 - 17.5
17.5 - 20.0
20.0 - 22.5
22.5 - 25.0
25.0 - 27.5
27.5 - 30.0

Exclusion

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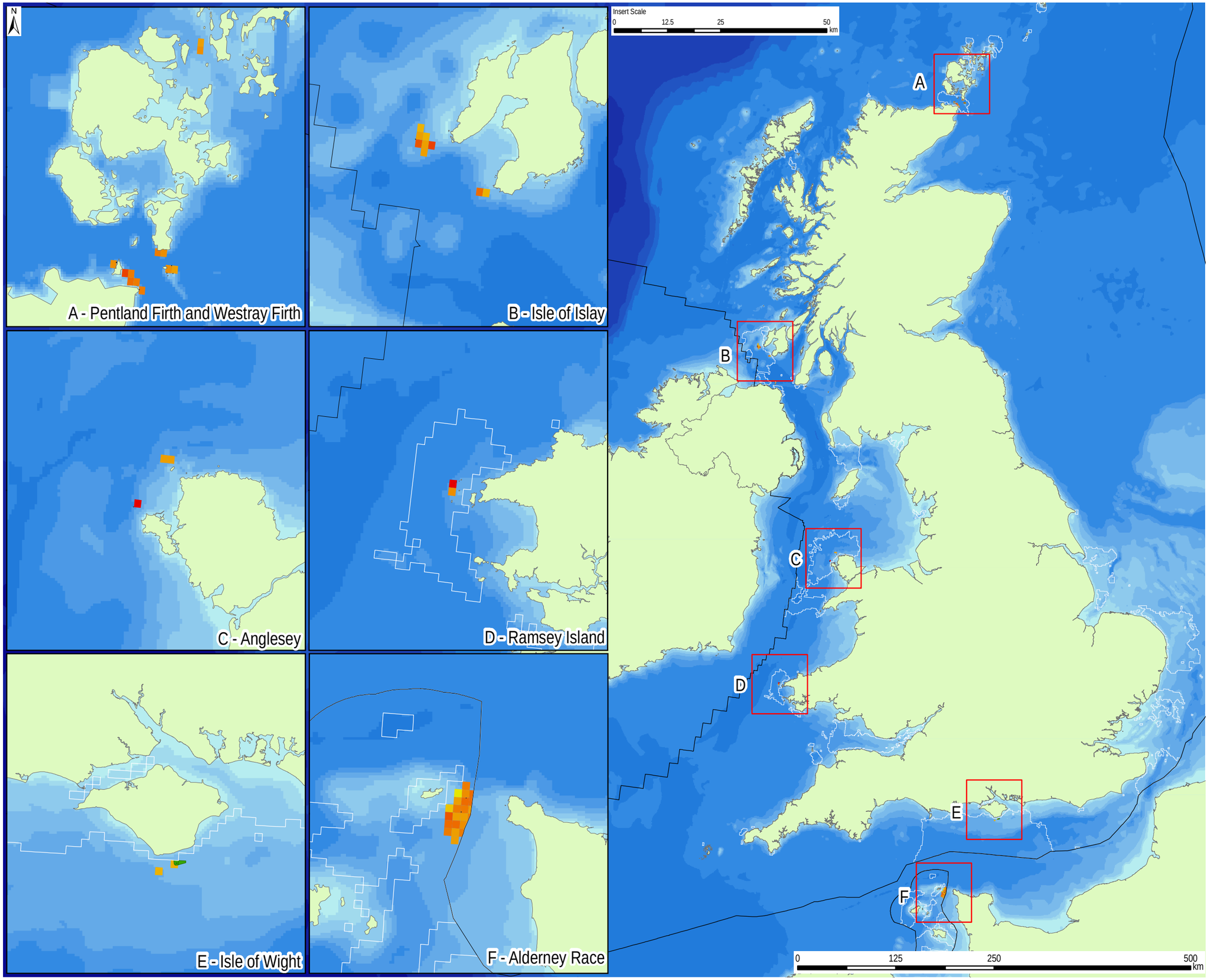
Potential Deployment Capacity per Square km - Group D

Figure 63



Land

Study Area

AOI

Exclusion

Disposal Site

Wreck/Obstruction

Power (GWh/y)

52.8 - 55.0

55.1 - 60.0

60.1 - 65.0

65.1 - 70.0

70.1 - 75.0

75.1 - 80.0

80.1 - 85.0

85.1 - 90.0

90.1 - 95.0

95.1 - 100.0

100.1 - 105.0

105.1 - 110.0

Date	By	Size	Version
May 2007	DP	A4	1
Projection		Scale	
WGS84 UTM 31N		1:4,606,644	
Reference			
3671 - Fig_BestSites.mxd			
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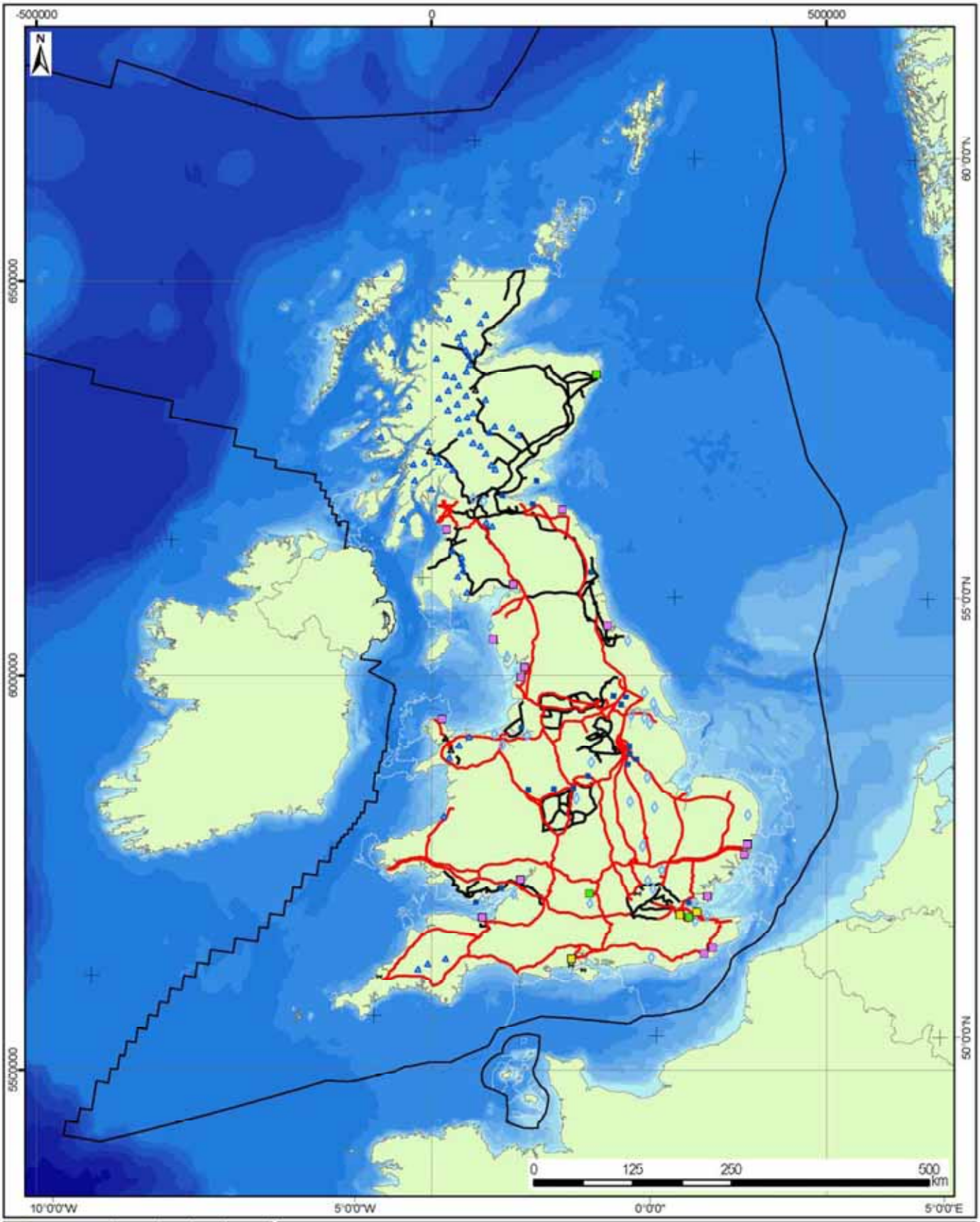
Best Sites of UK Tidal Resource

GIS Figure 64



Date	By	Size	Version
Apr 2007	DP	A4	1
Projection		Scale	
WGS UTM 31N		1:6,800,000	
Reference			
3671 - Fig_NationalGrid.mxd			
Produced by ABPmer Ltd			

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Derived from National Grid and Electricity Association data

Transmission lines
- 400kw line
- 275kv line
- AOI

Power Stations
- Pumped Storage
- Hydro
- Combined Cycle Gas Turbine
- Gas Turbine
- Coal Fired
- Oil Fired
- Dual Fired
- Nuclear

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Great Britain Electricity Transmission Network

GIS Figure 65

ABP Marine Environmental Research Ltd
Suite B, Waterside House
Town Quay
Southampton
Hampshire SO14 2AQ

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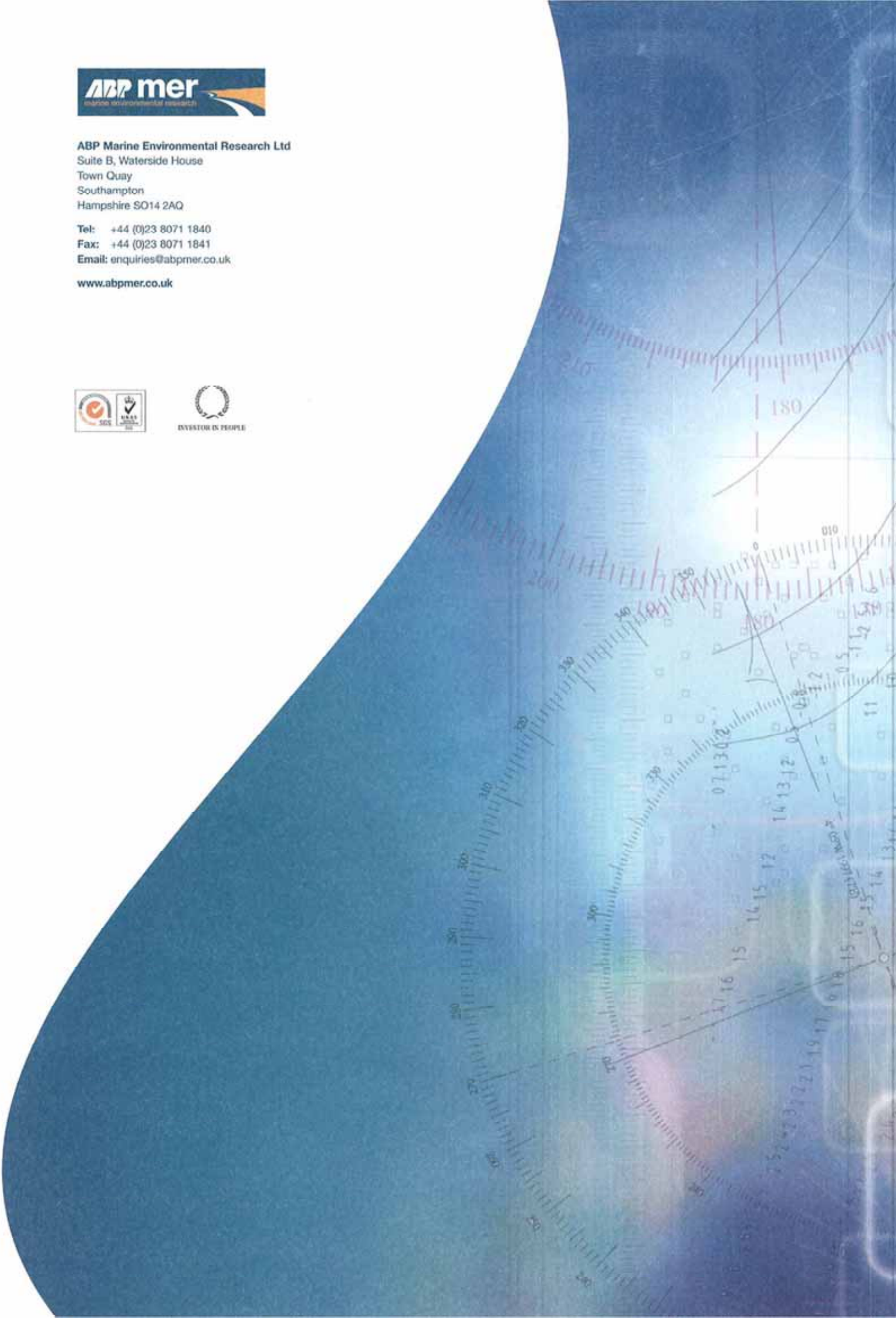
Fax: +44 (0)23 8071 1841
Email: enquiries@abpmer.co.uk

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