



**SCOTTISHPOWER
RENEWABLES**

East Anglia ONE North Offshore Windfarm

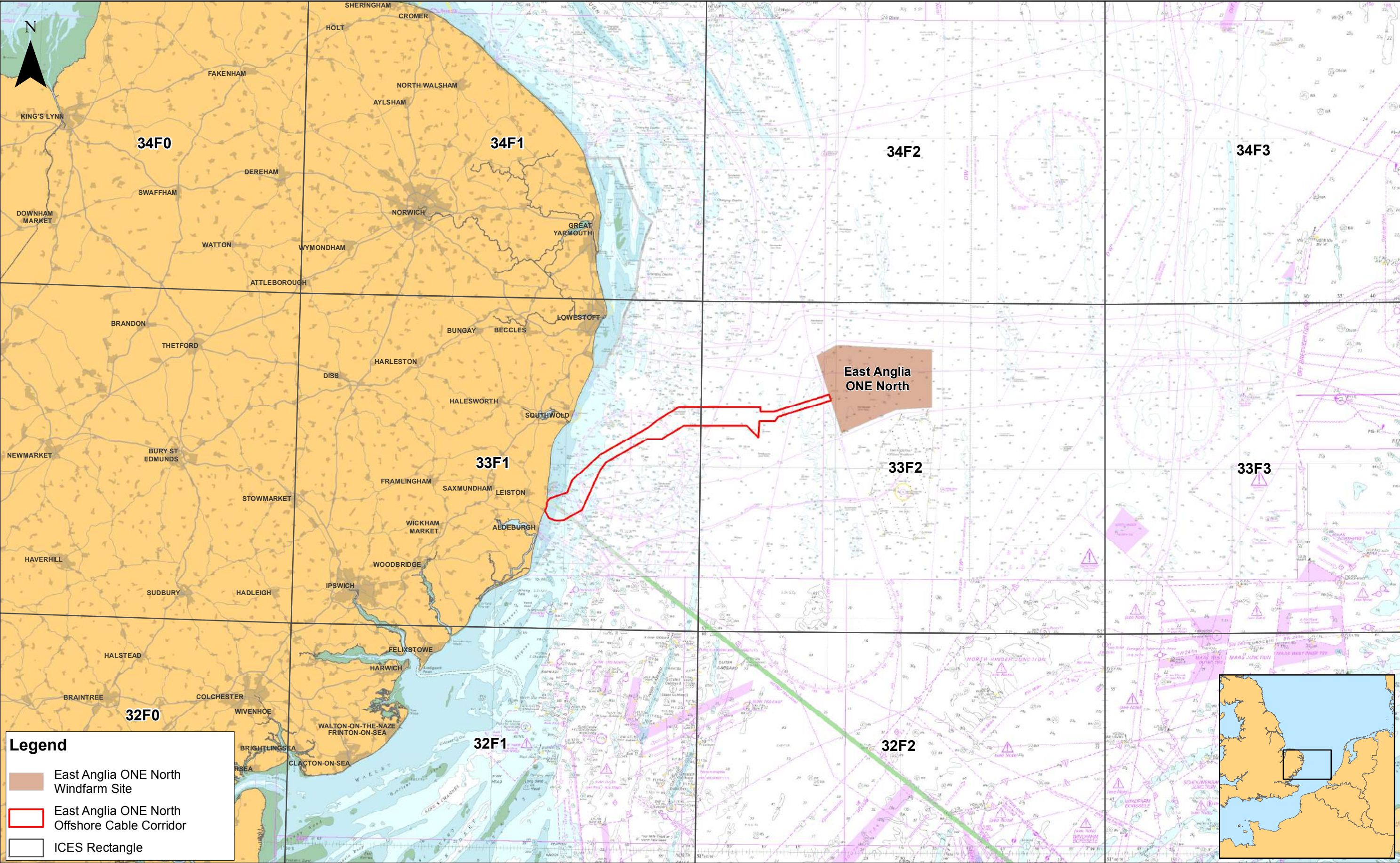
Chapter 10


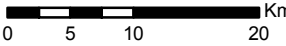
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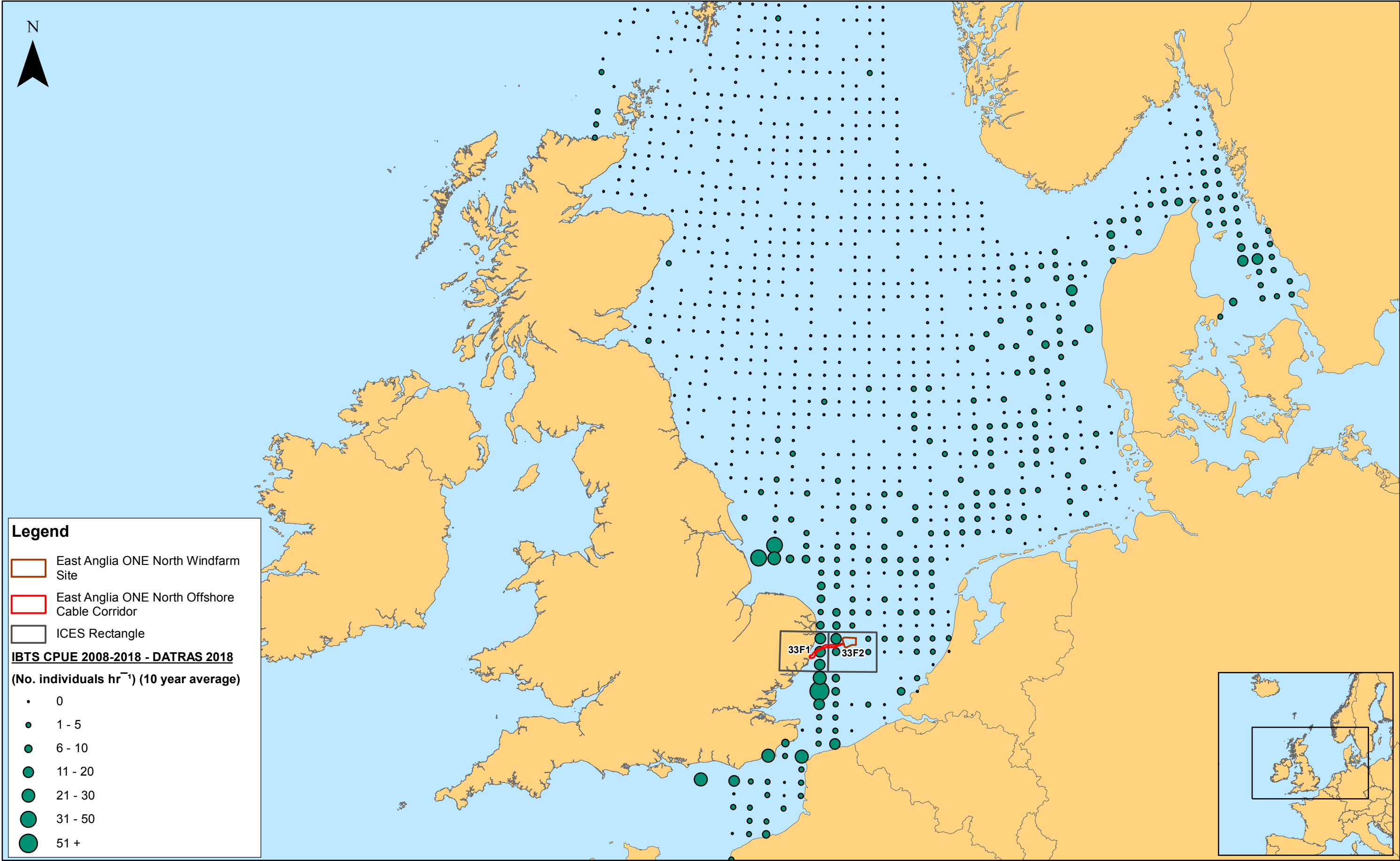
Figures


Preliminary Environmental Information
Volume 2

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				1:600,000 Scale @ A3				East Anglia ONE North East Anglia ONE North Offshore Windfarm and Offshore Cable Corridor Study Areas		Drg No	EA1N-DEV-DRG-IBR-000310	
1				19/11/2018	FC	First Issue.		Prepared: FC		Rev	1	Datum: WGS 1984 Projection: Zone 31N
						Checked: KC				Date	19/11/18	
						Approved: PP				Figure	10.1	
				Rev	Date	By	Comment					





Rev	Date	By	Comment
1	19/11/2018	FC	First Issue.

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Scale @ A3

0

50

100

200

Km

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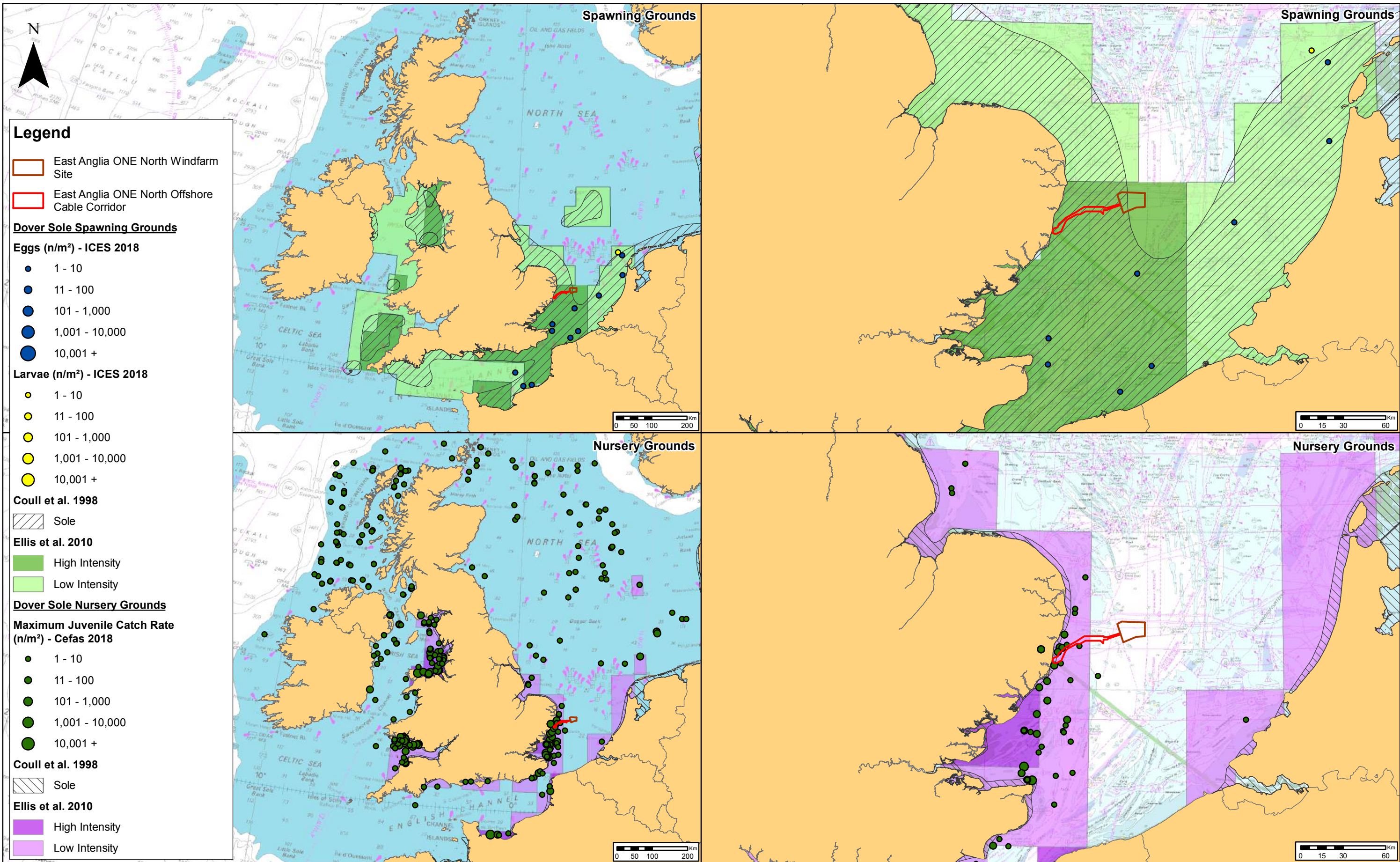
East Anglia ONE North


Average Number (Catch per Standardised Haul)
of Dover Sole from IBTS Survey (2008 - 2018)

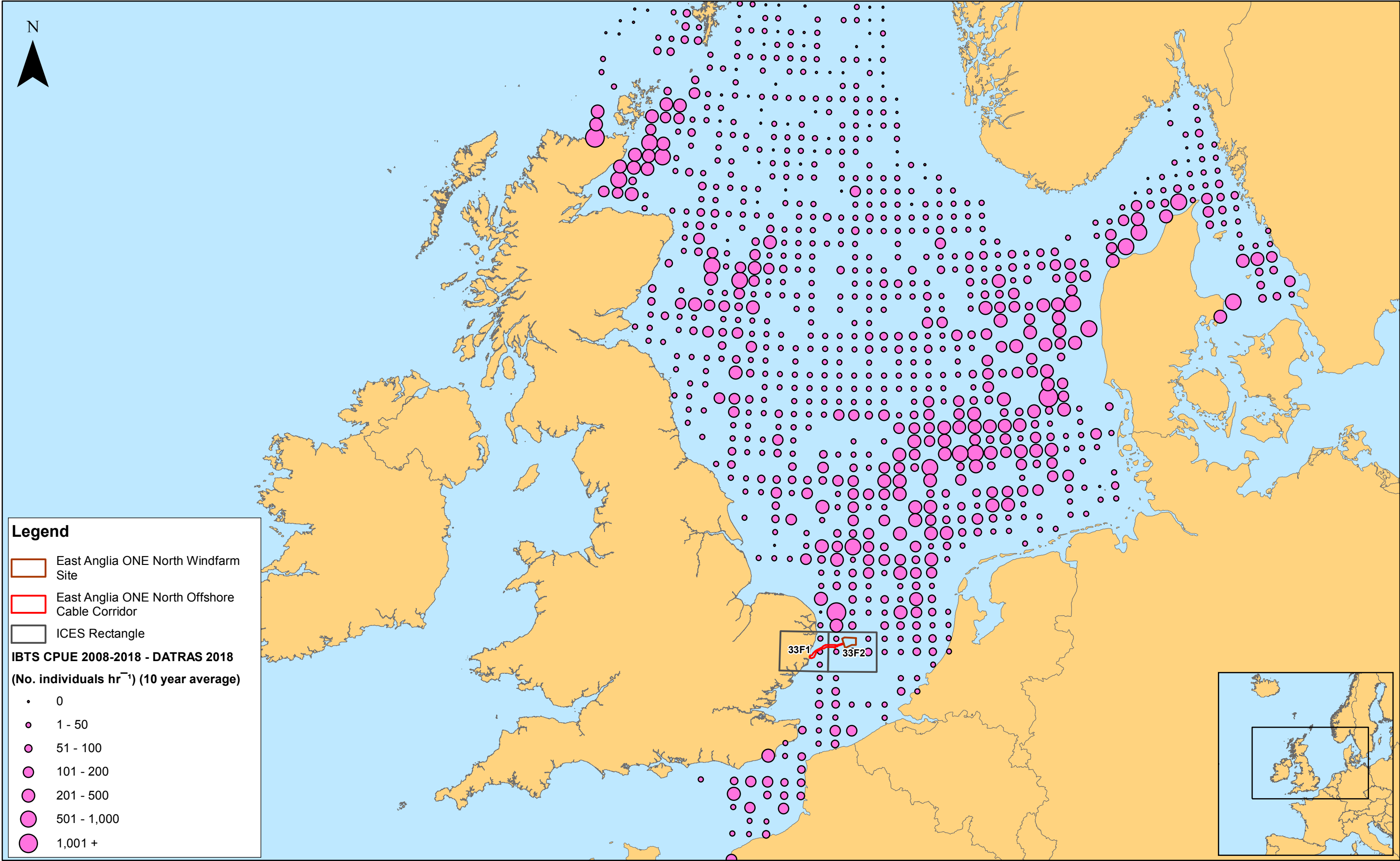
Drg No	Rev	Date	Figure
EA1N-DEV-DRG-IBR-000311	1	19/11/18	10.2


Datum:
WGS 1984

Projection:
Zone 31N



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							Rev	1			Datum: WGS 1984 Projection: Zone 31N		
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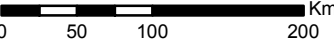




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Scale @ A3



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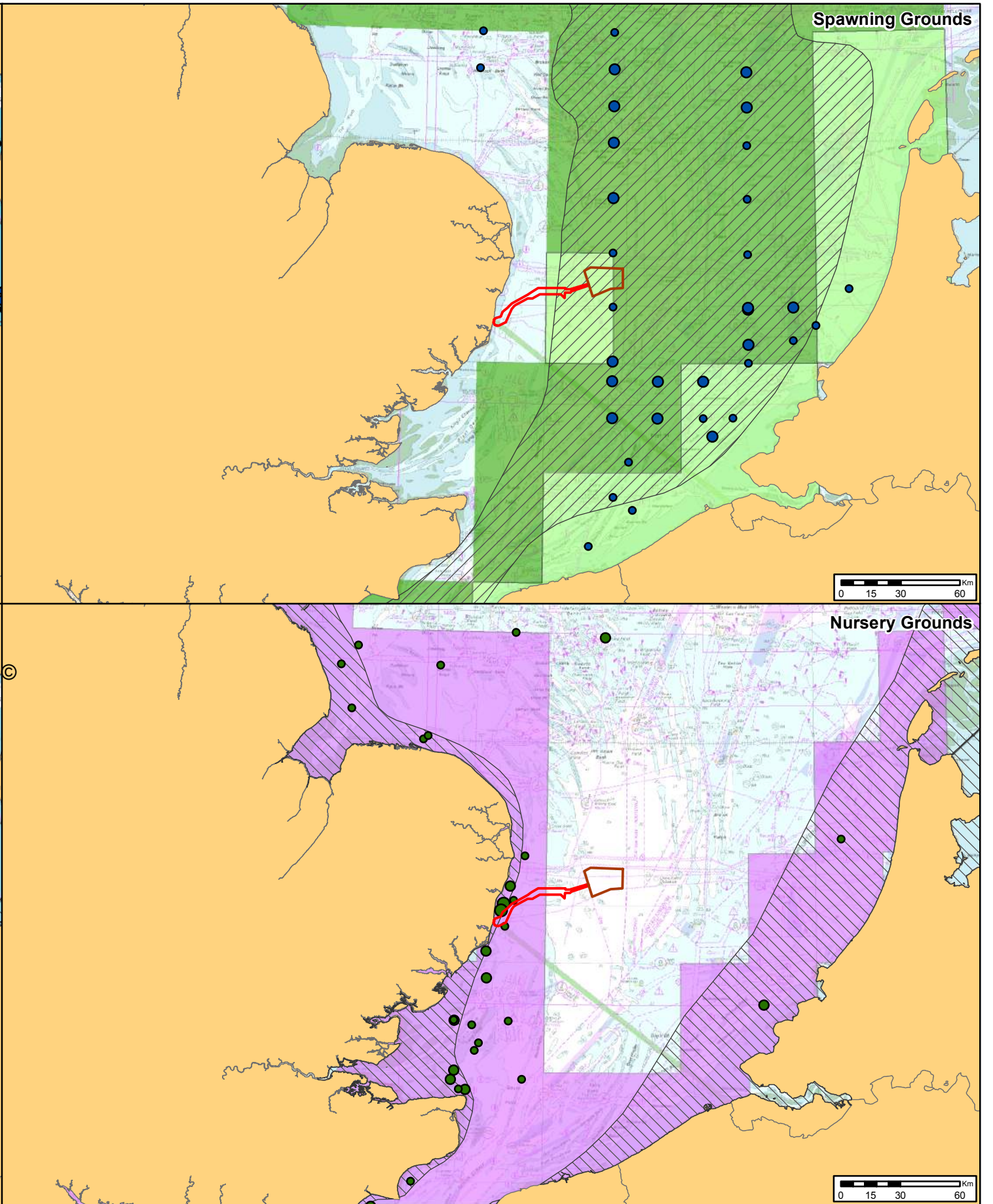
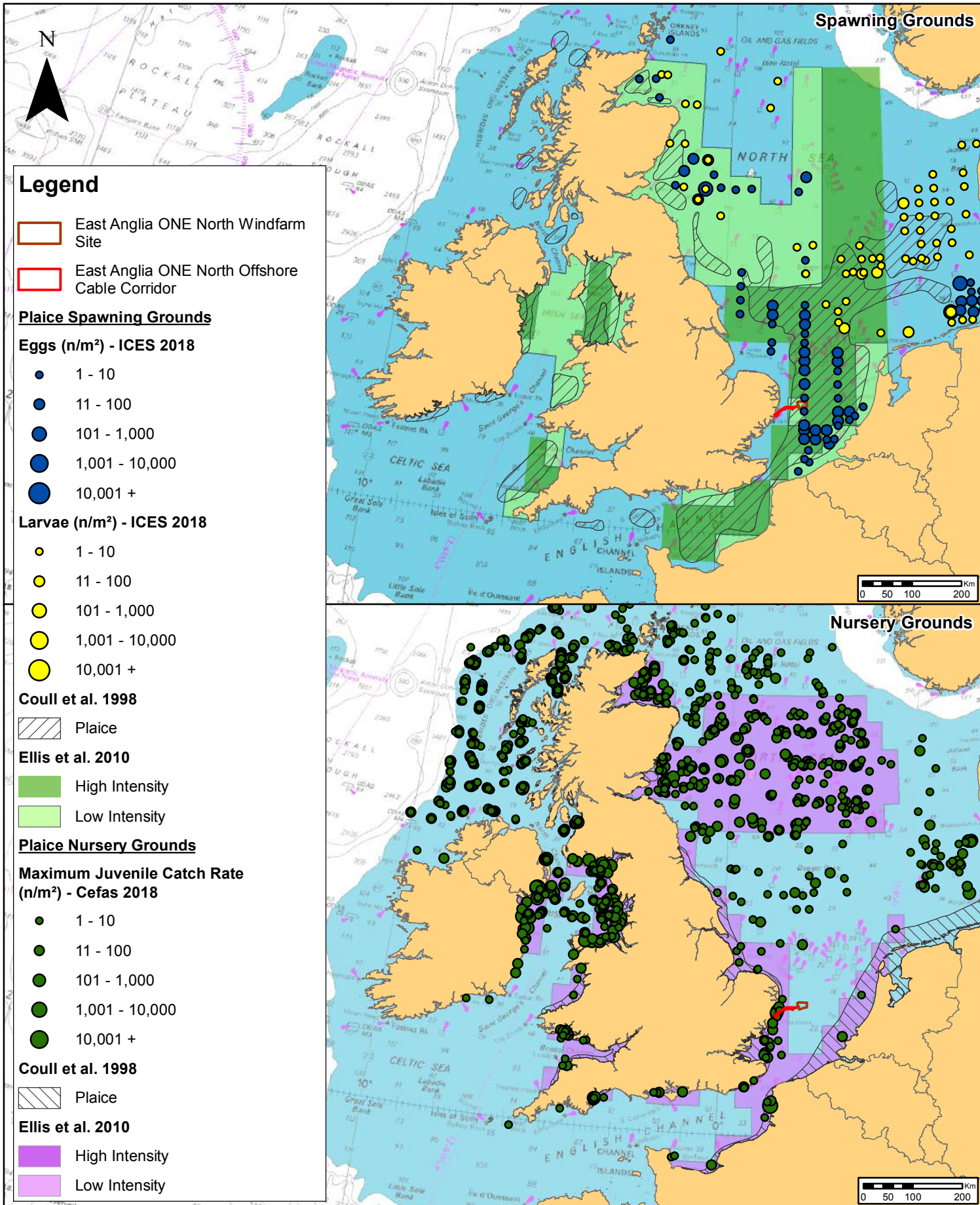
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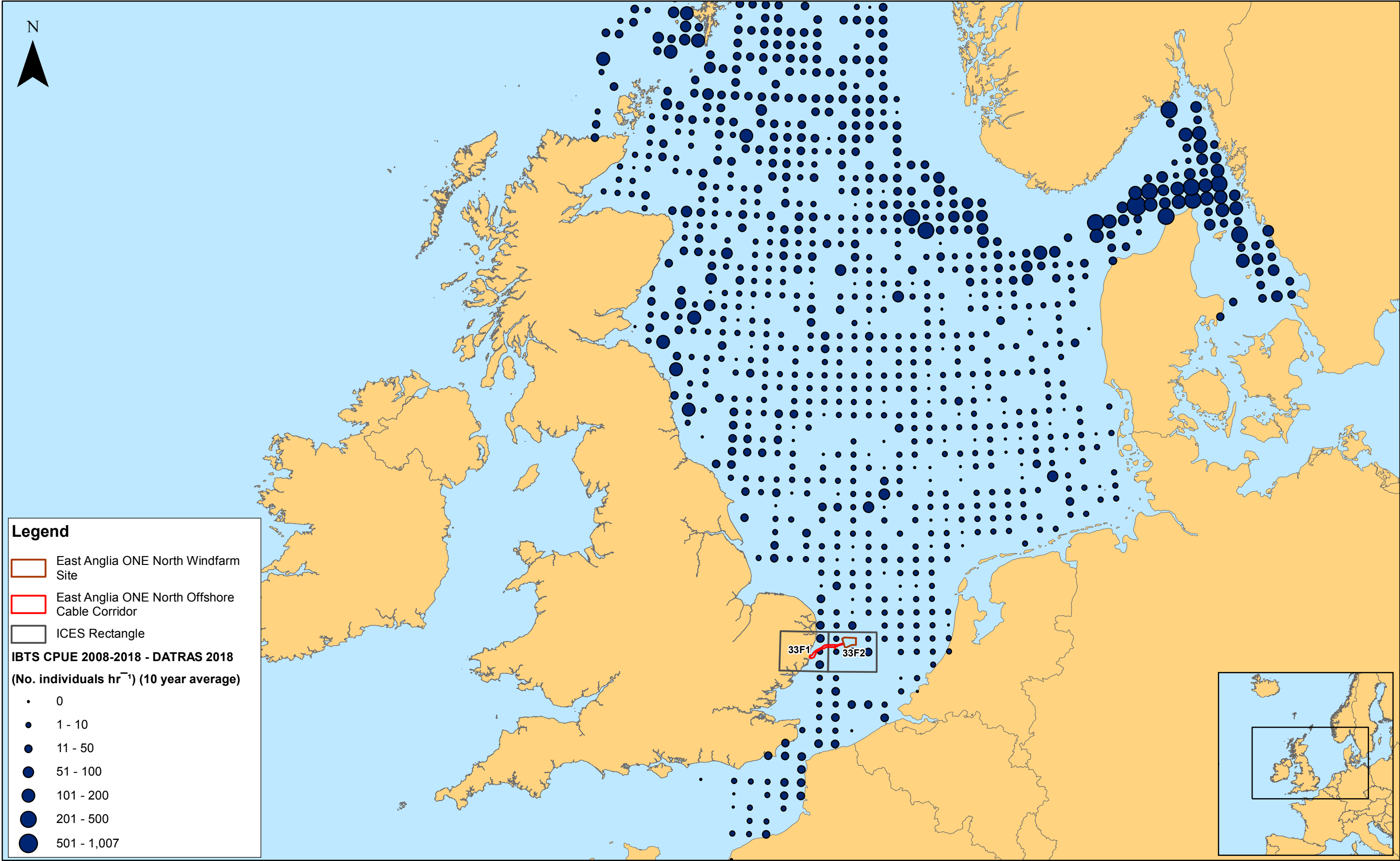
East Anglia ONE North


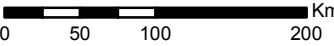
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of Plaice from IBTS Survey (2008 - 2018)

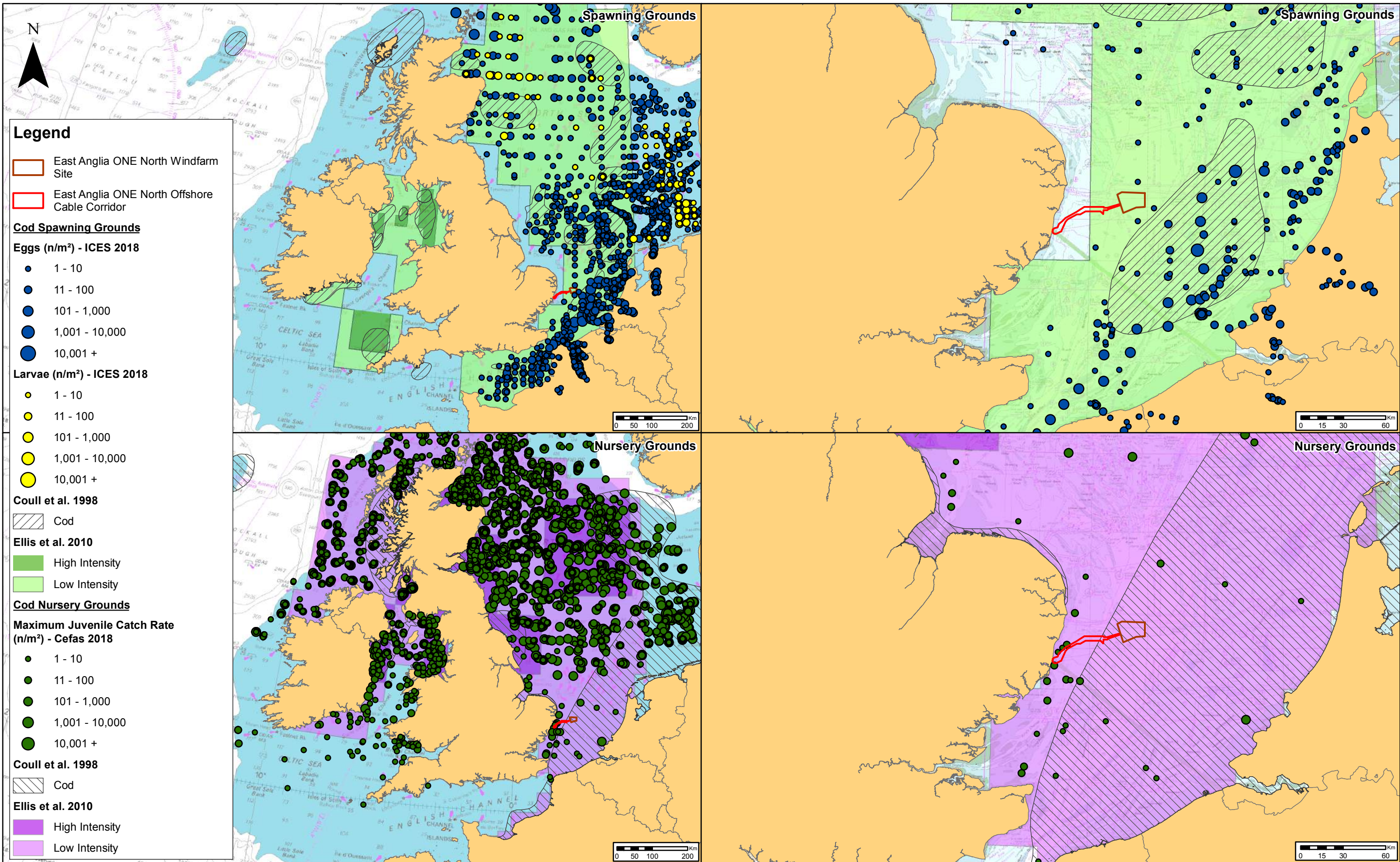
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Rev	1	Datum: WGS 1984 Projection: Zone 31N
Date	19/11/18	
Figure	10.4	



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	1	19/11/2018	FC	First Issue.	Checked:	KC	Source: © Cefas, 2018. © ICES International Herring Larvae Survey, 2018. © The Crown Estate, 2018. Charts from MarineFIND.co.uk Licence No EK001-0645-MF0095. Not to be used for navigation. This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Offshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.				Date	19/11/18	
	Rev	Date	By	Comment	Approved:	PP					Figure	10.5	



						1:5,000,000 Scale @ A3		East Anglia ONE North Average Number (Catch per Standardised Haul) of Cod from IBTS Survey (2008 - 2018)	Drg No	EA1N-DEV-DRG-IBR-000315	
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	Rev	Date	By	Comment	Approved: PP				Figure	10.6	



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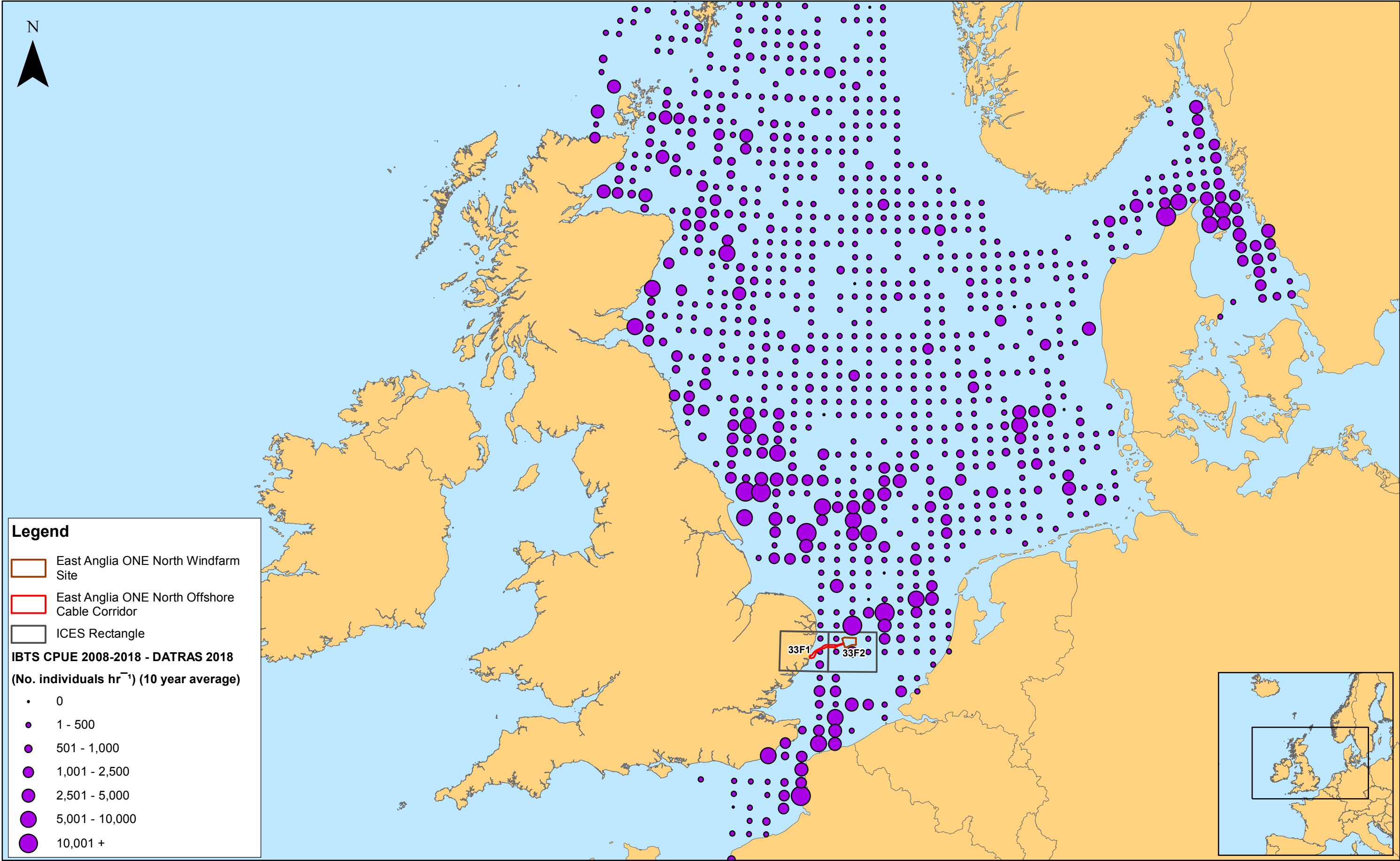
Scale @ A3



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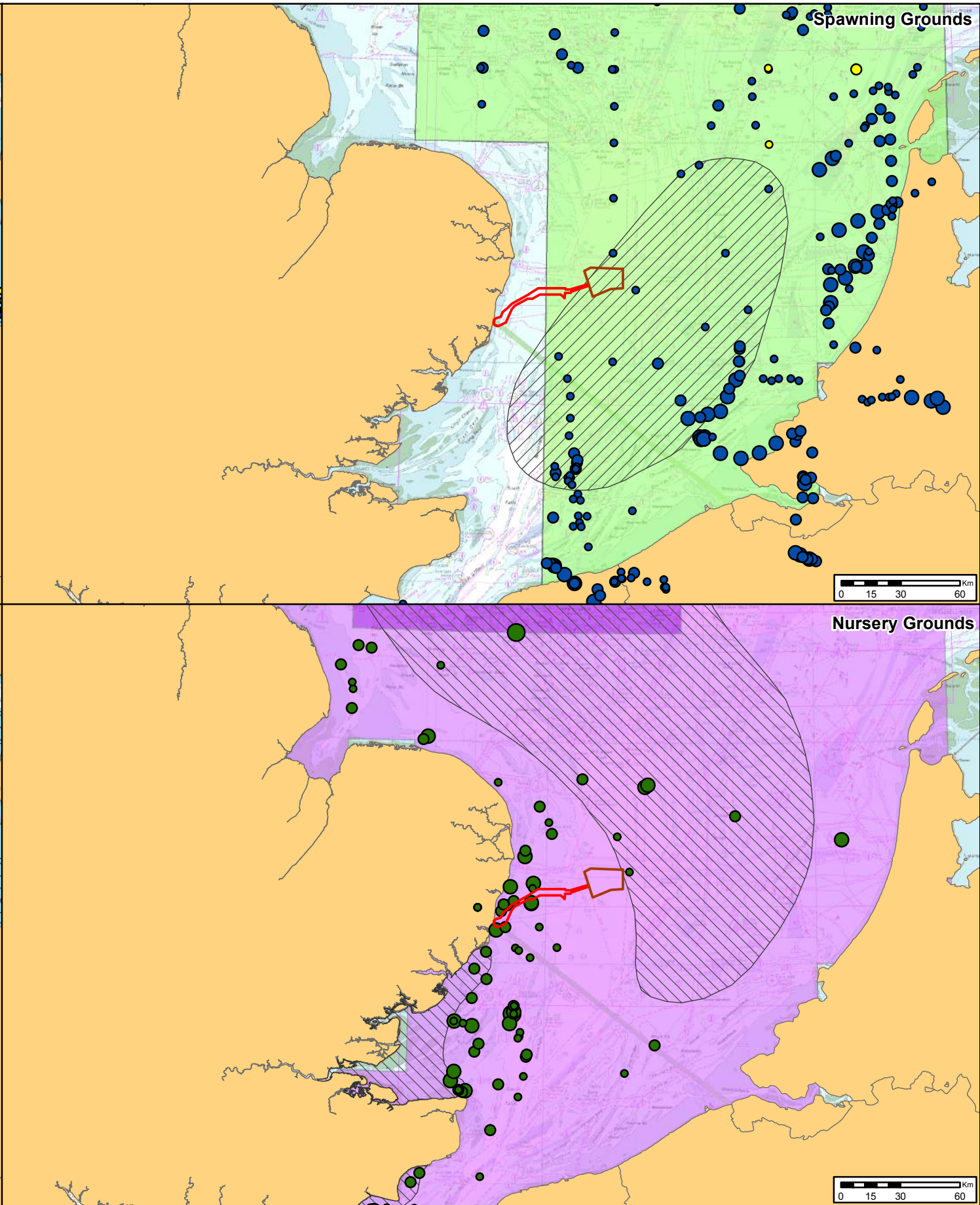
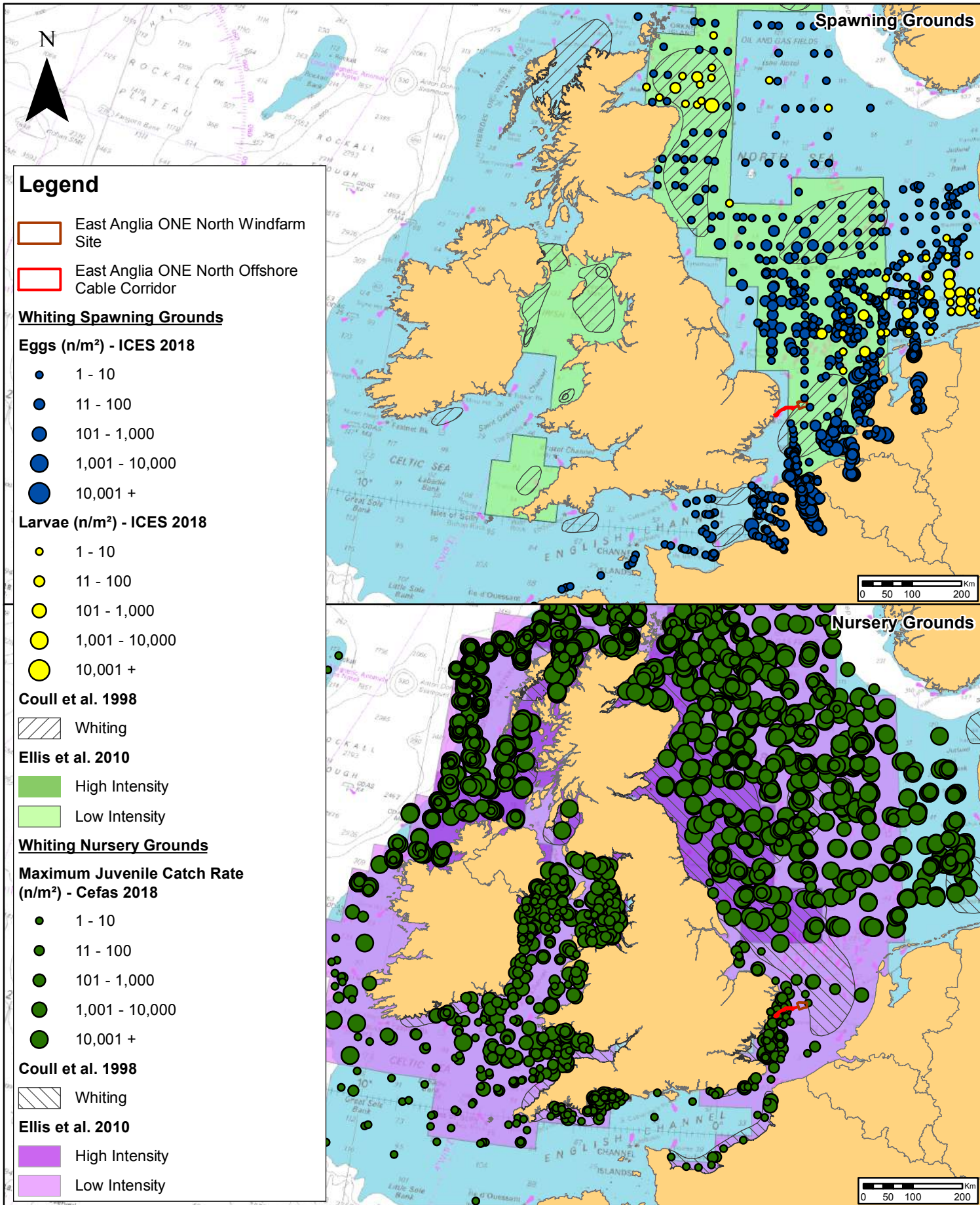
East Anglia ONE North


Cod Spawning and Nursery Grounds
(Coull et al., 1998 and Ellis et al., 2010)

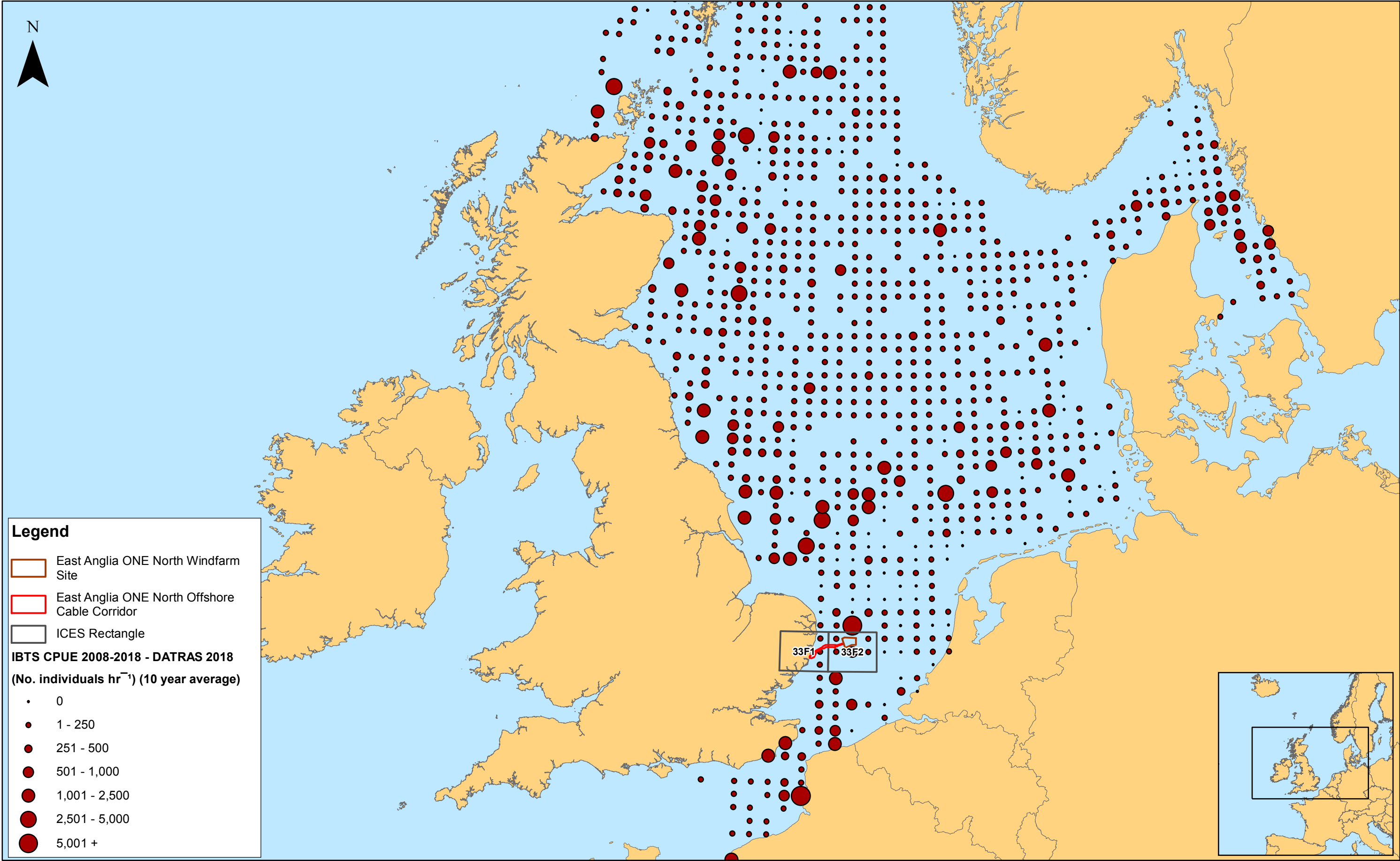
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Figure	10.7	




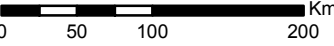
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					Prepared: FC				Rev	1	Datum: WGS 1984 Projection: Zone 31N
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	Rev	Date	By	Comment	Approved: PP				Figure	10.8	



									East Anglia ONE North Whiting Spawning and Nursery Grounds (Coull et al., 1998 and Ellis et al., 2010)	Drg No	EA1N-DEV-DRG-IBR-000318	
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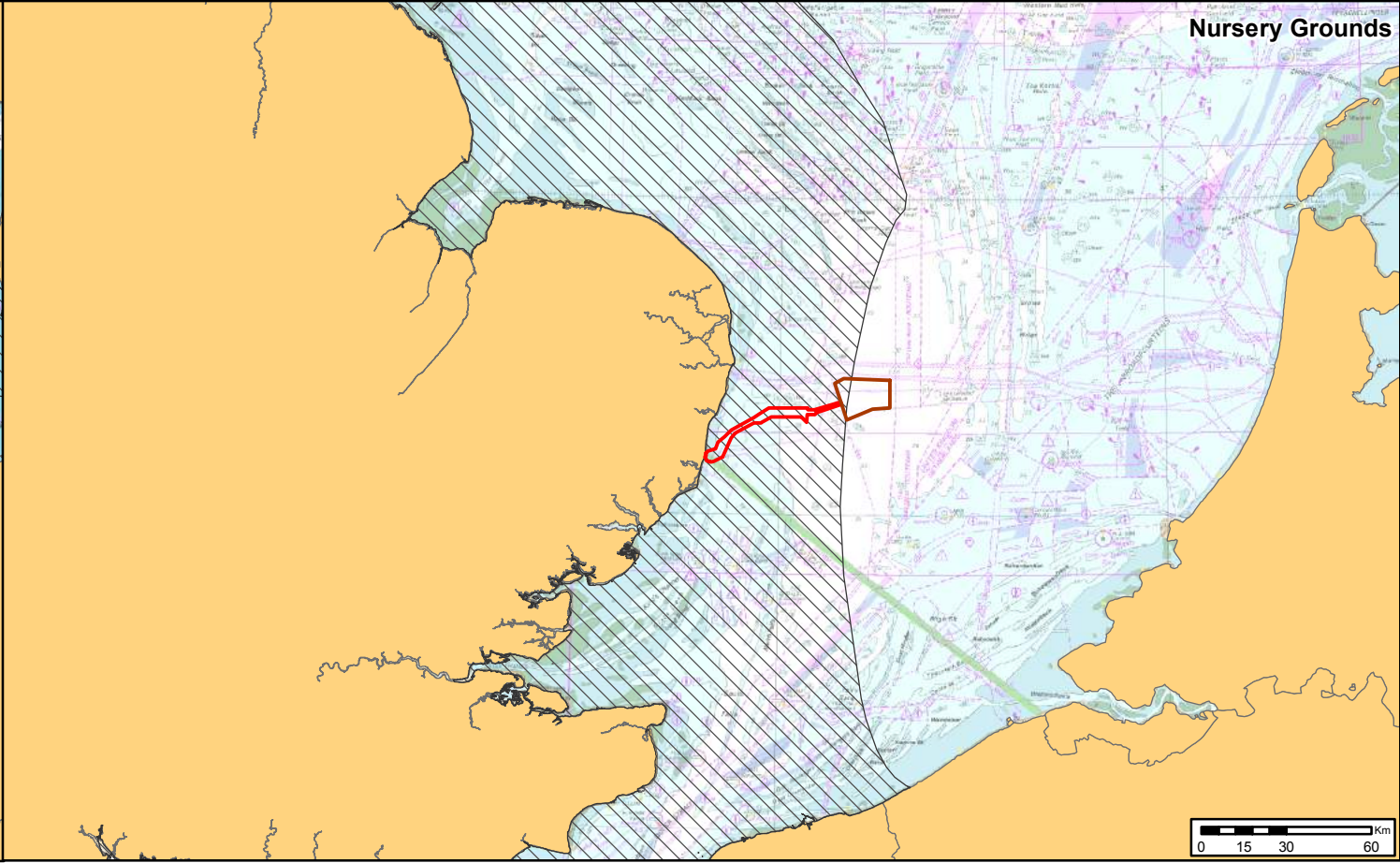
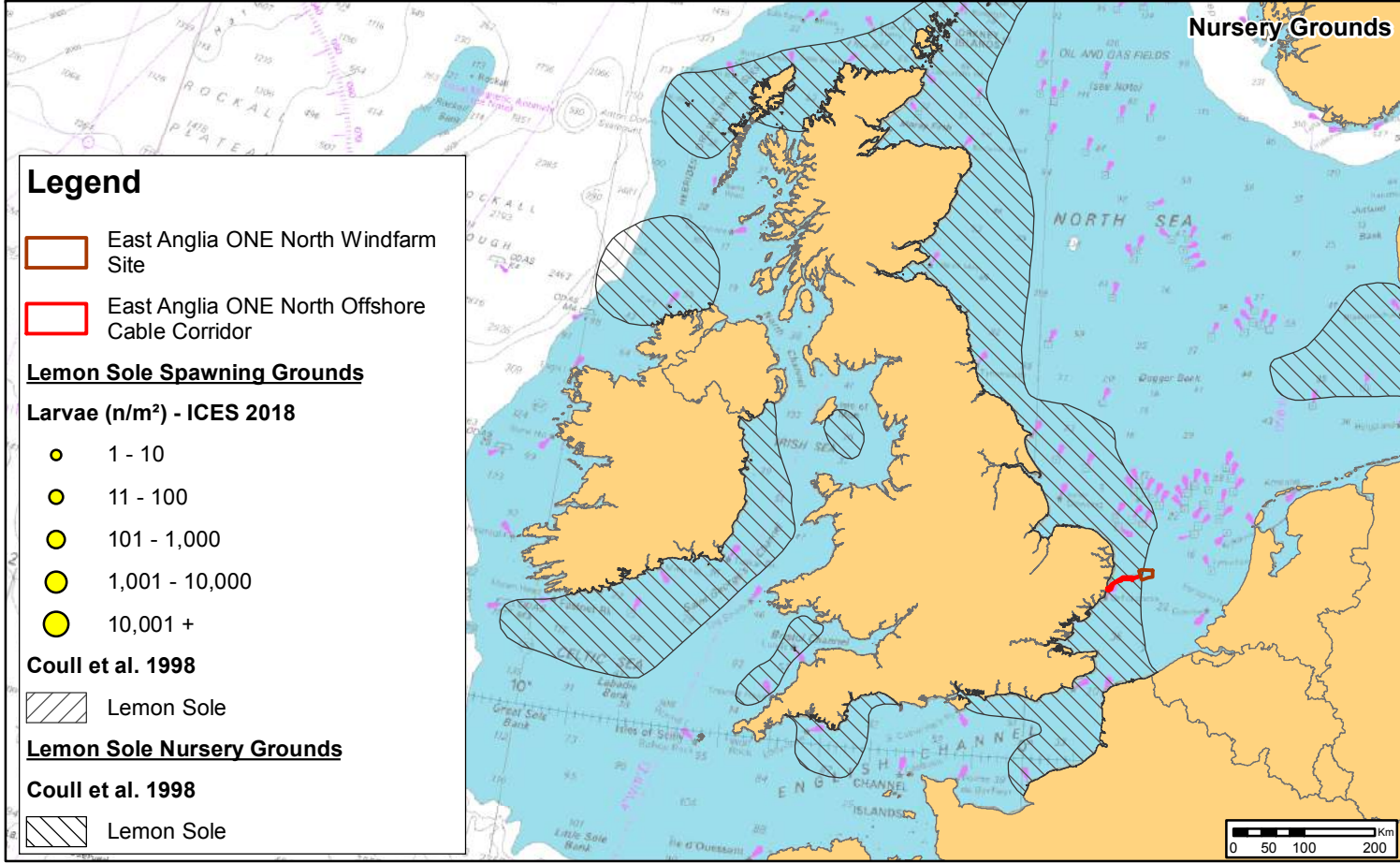
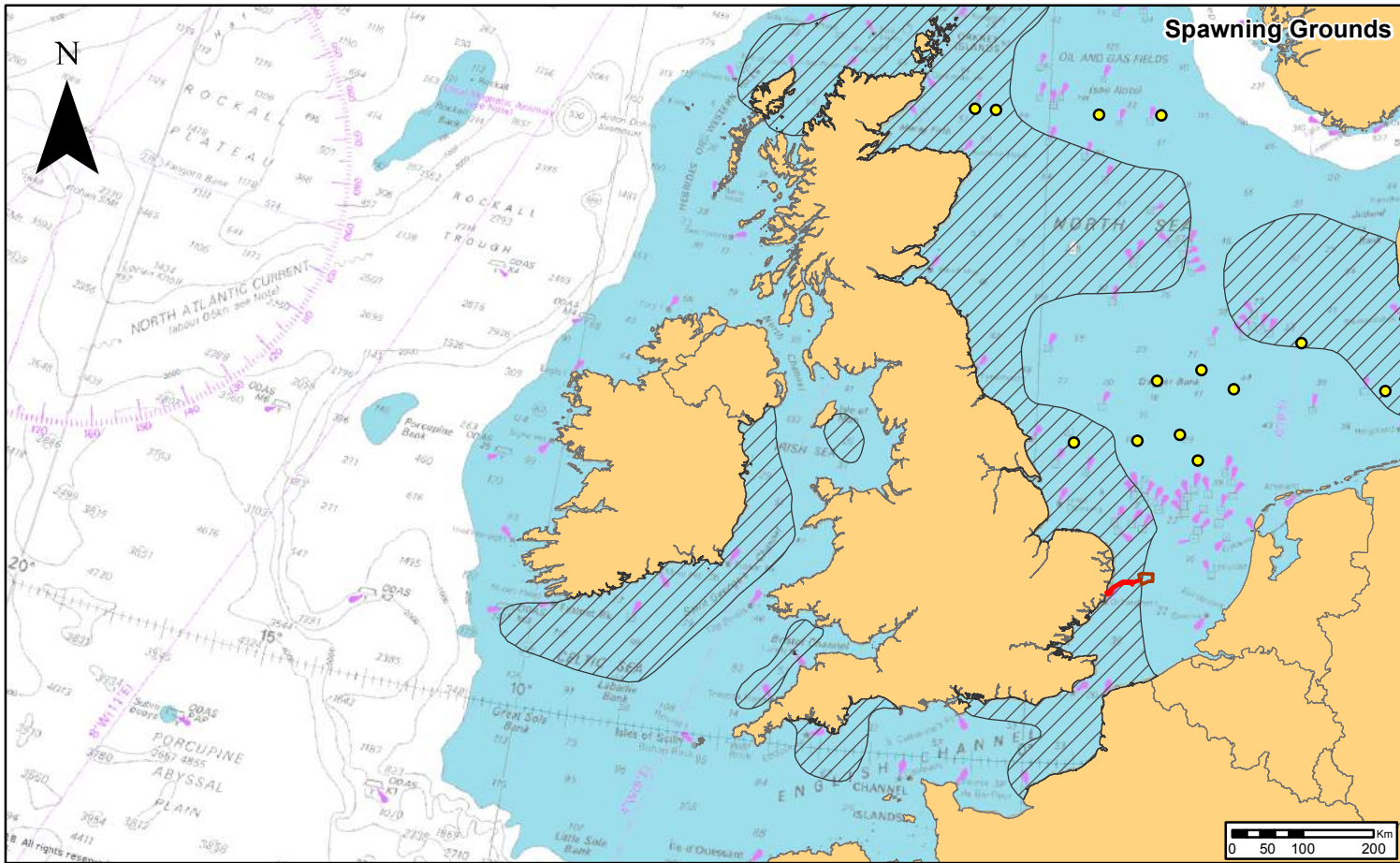




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1	19/11/2018	FC	First Issue.	Checked:	KC	<small>Source: © ICES Database of Trawl Surveys (Dattras), 2018. © The Crown Estate, 2018. Charts from MarineFIND.co.uk Licence No: EK001-0645-MF0095. Not to be used for navigation. This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Offshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.</small>		
Rev	Date	By	Comment	Approved:	PP			

East Anglia ONE North
Average Number (Catch per Standardised Haul)
of Lemon Sole from IBTS Survey (2008 - 2018)

Drg No	EA1N-DEV-DRG-IBR-000319	
Rev	1	Datum: WGS 1984 Projection: Zone 31N
Date	19/11/18	
Figure	10.10	



Legend

- East Anglia ONE North Windfarm Site
- East Anglia ONE North Offshore Cable Corridor

Lemon Sole Spawning Grounds

Larvae (n/m²) - ICES 2018

- 1 - 10
- 11 - 100
- 101 - 1,000
- 1,001 - 10,000
- 10,001 +

Coull et al. 1998

- Lemon Sole

Lemon Sole Nursery Grounds

Coull et al. 1998

- Lemon Sole



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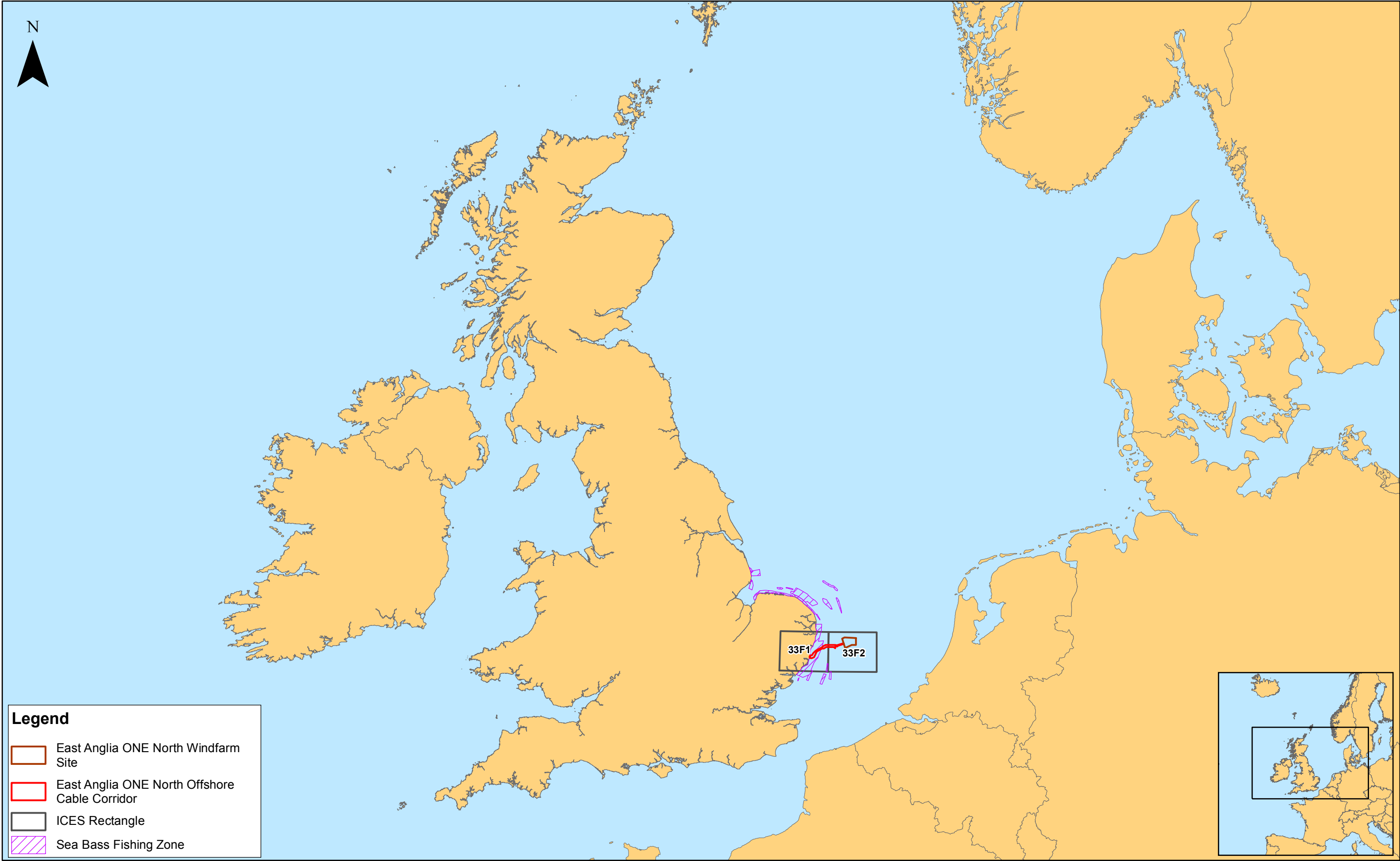
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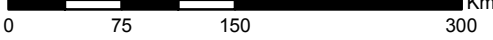
East Anglia ONE North

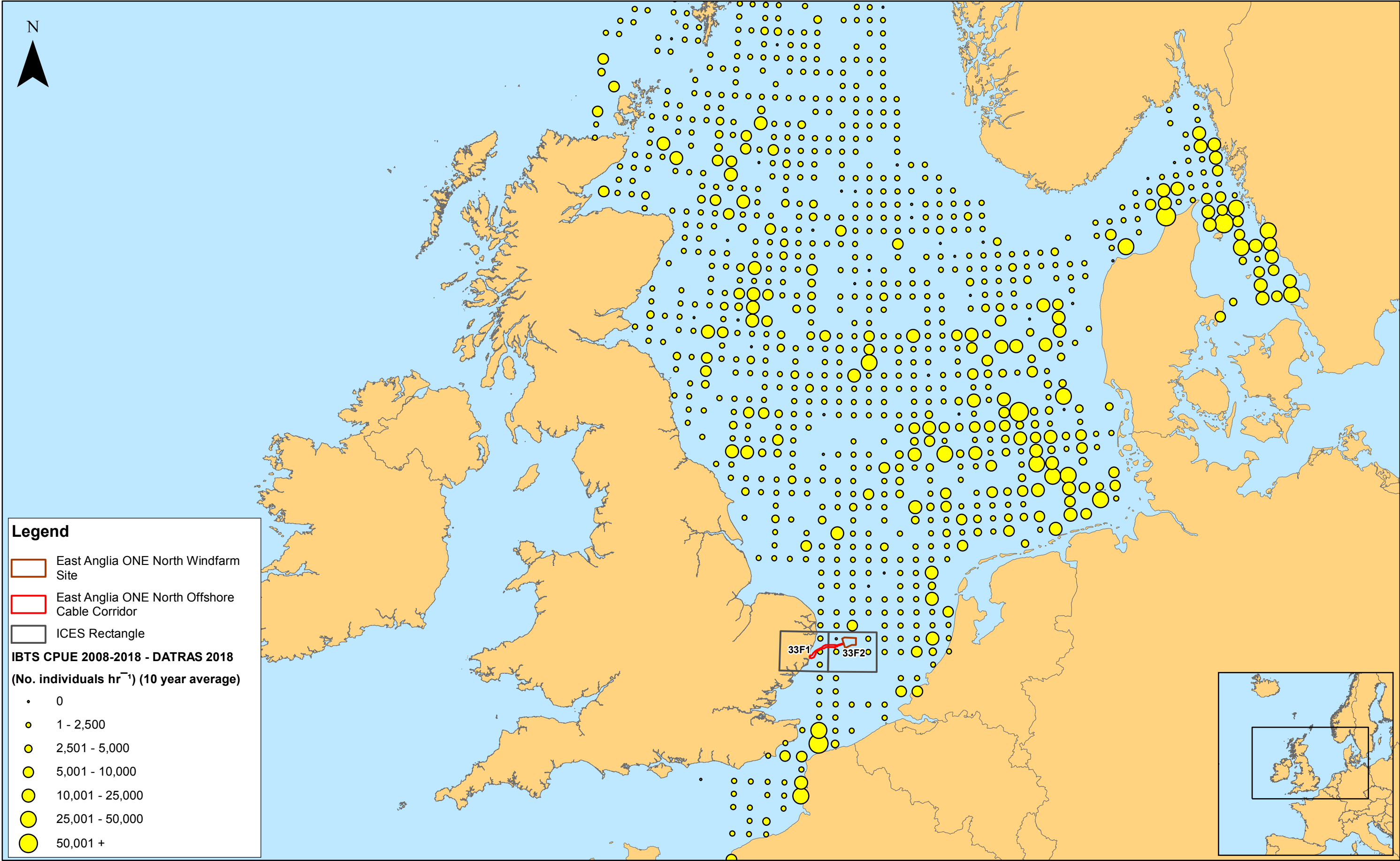
Lemon Sole Spawning and Nursery Grounds (Coull et al., 1998)


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Date	19/11/18	
Figure	10.11	

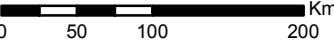




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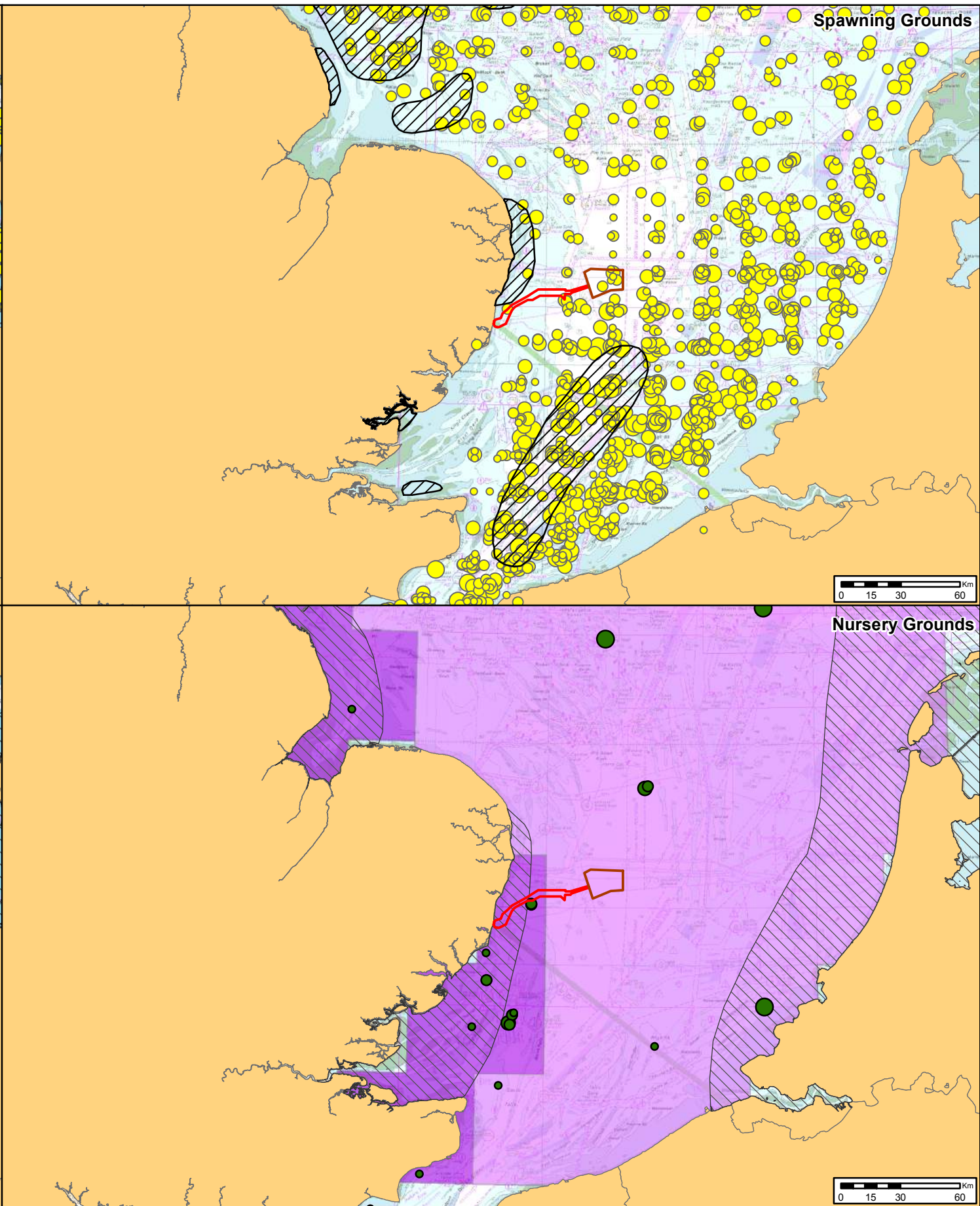
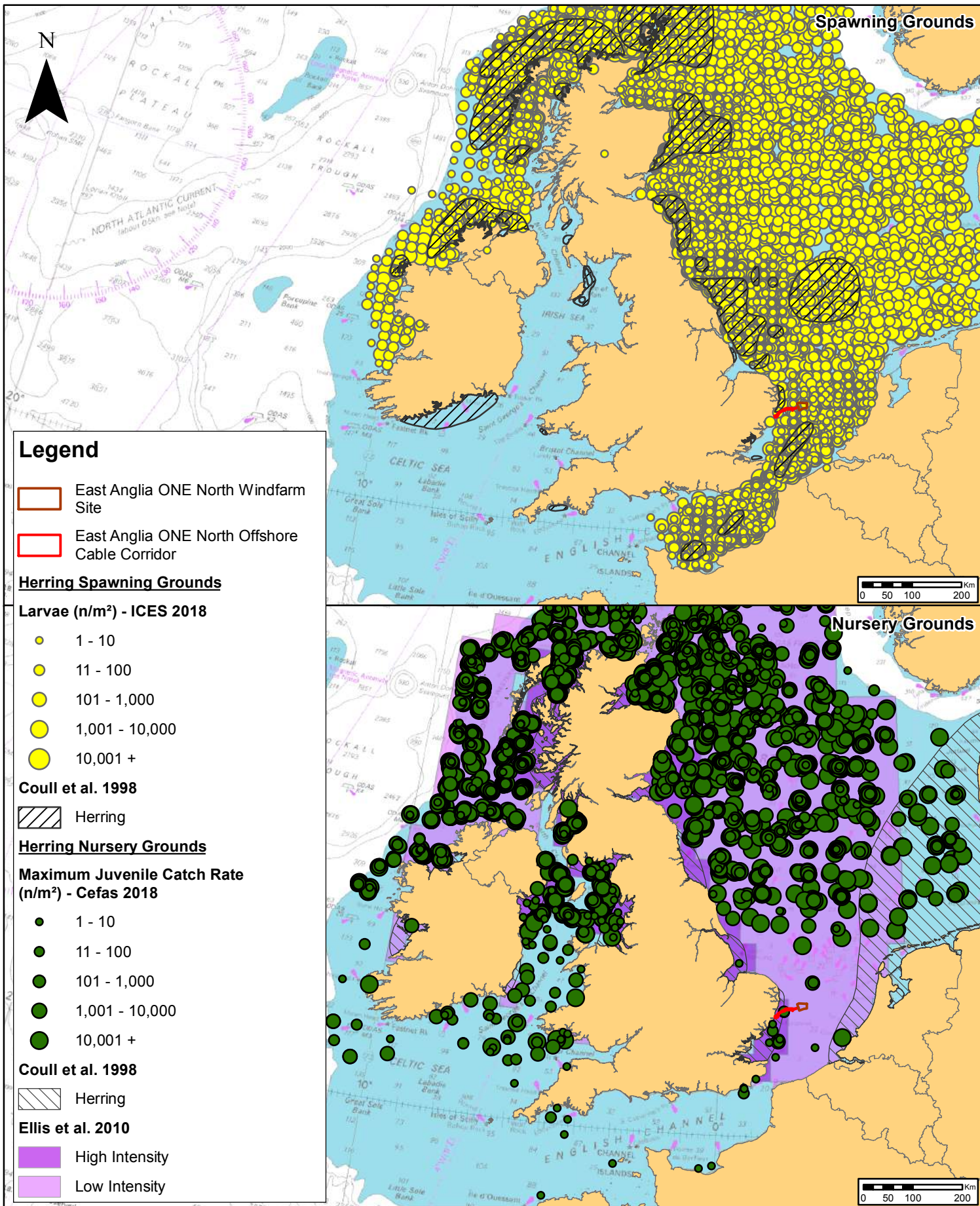



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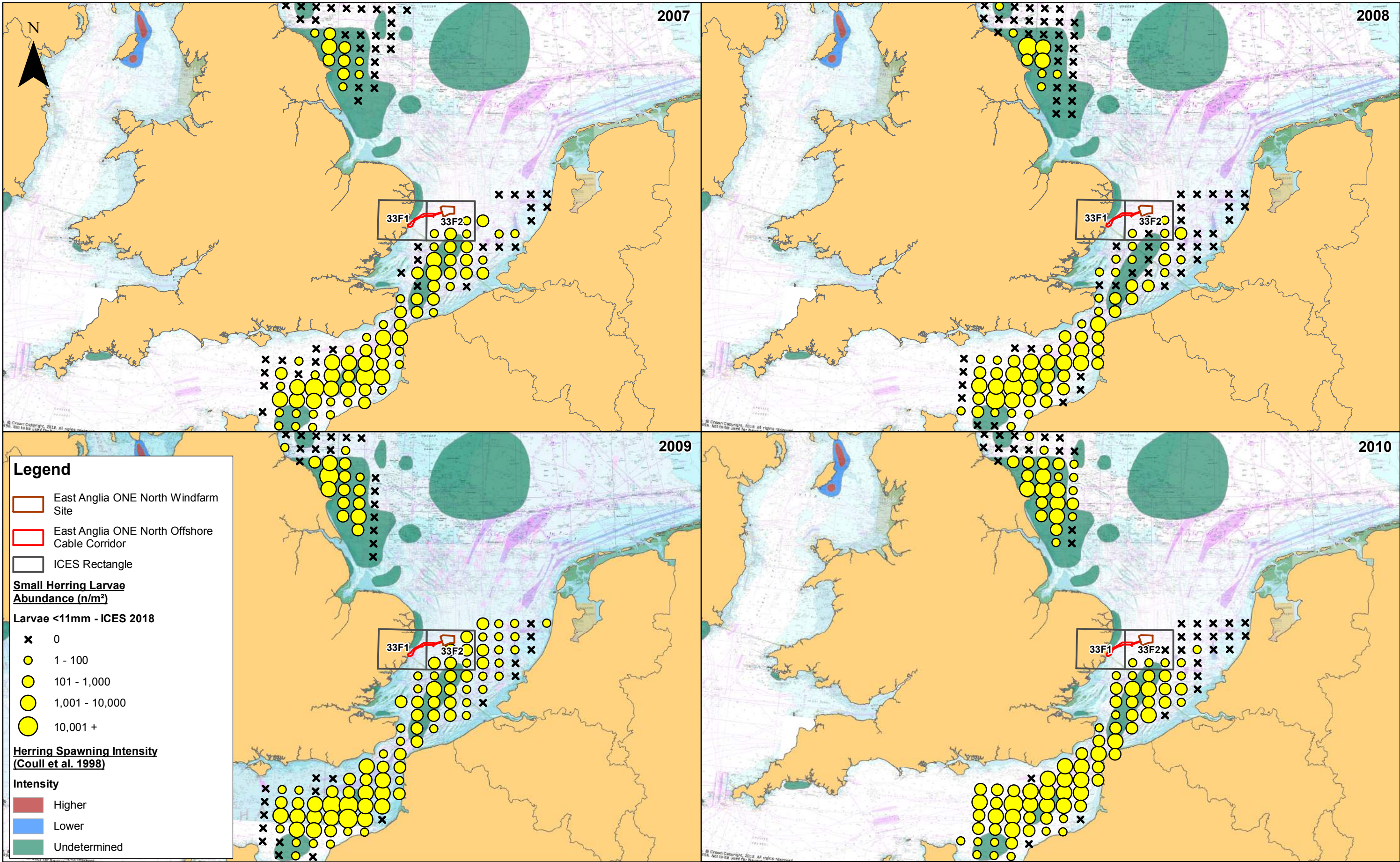
East Anglia ONE North


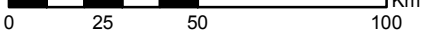
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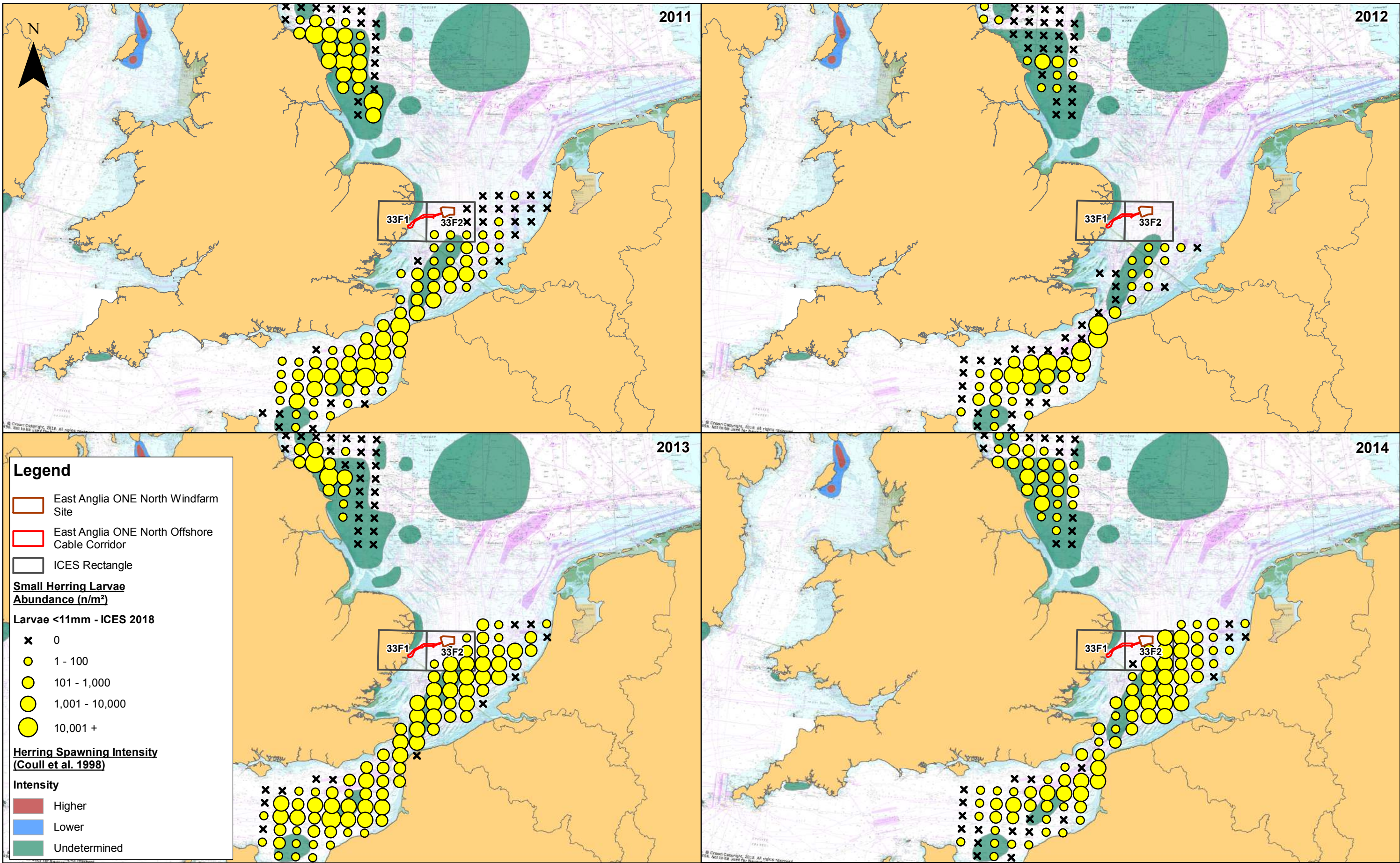
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Rev	1	Datum: WGS 1984 Projection: Zone 31N
Date	19/11/18	
Figure	10.13	



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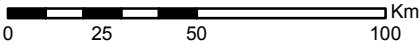
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1				Checked: KC		Source: © Cefas, 2018. © ICES International Herring Larvae Survey, 2018. © The Crown Estate, 2018. Charts from MarineFIND.co.uk Licence No EK001-0645-MF0095. Not to be used for navigation.						Rev	1	Datum: WGS 1984 Projection: Zone 31N
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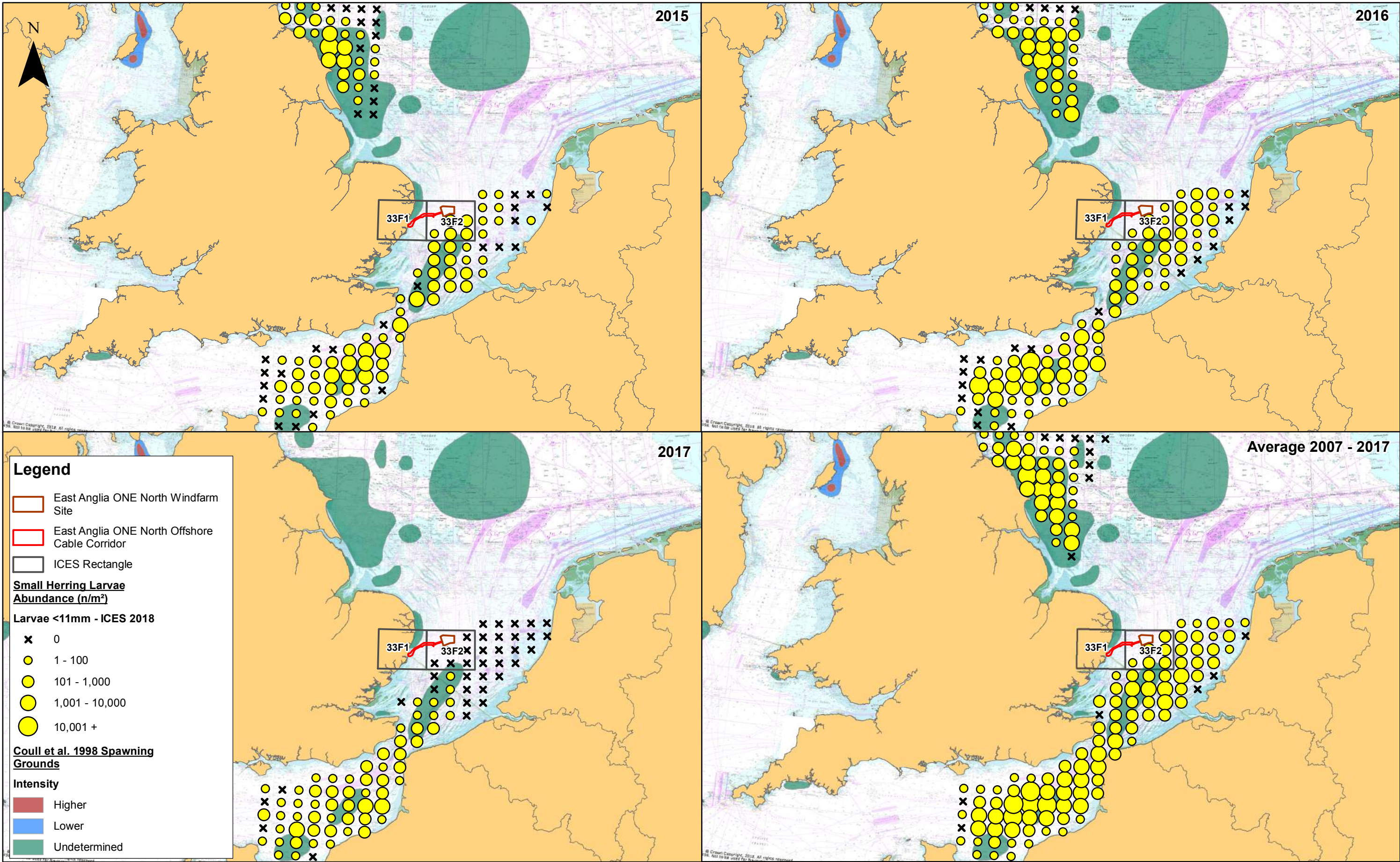




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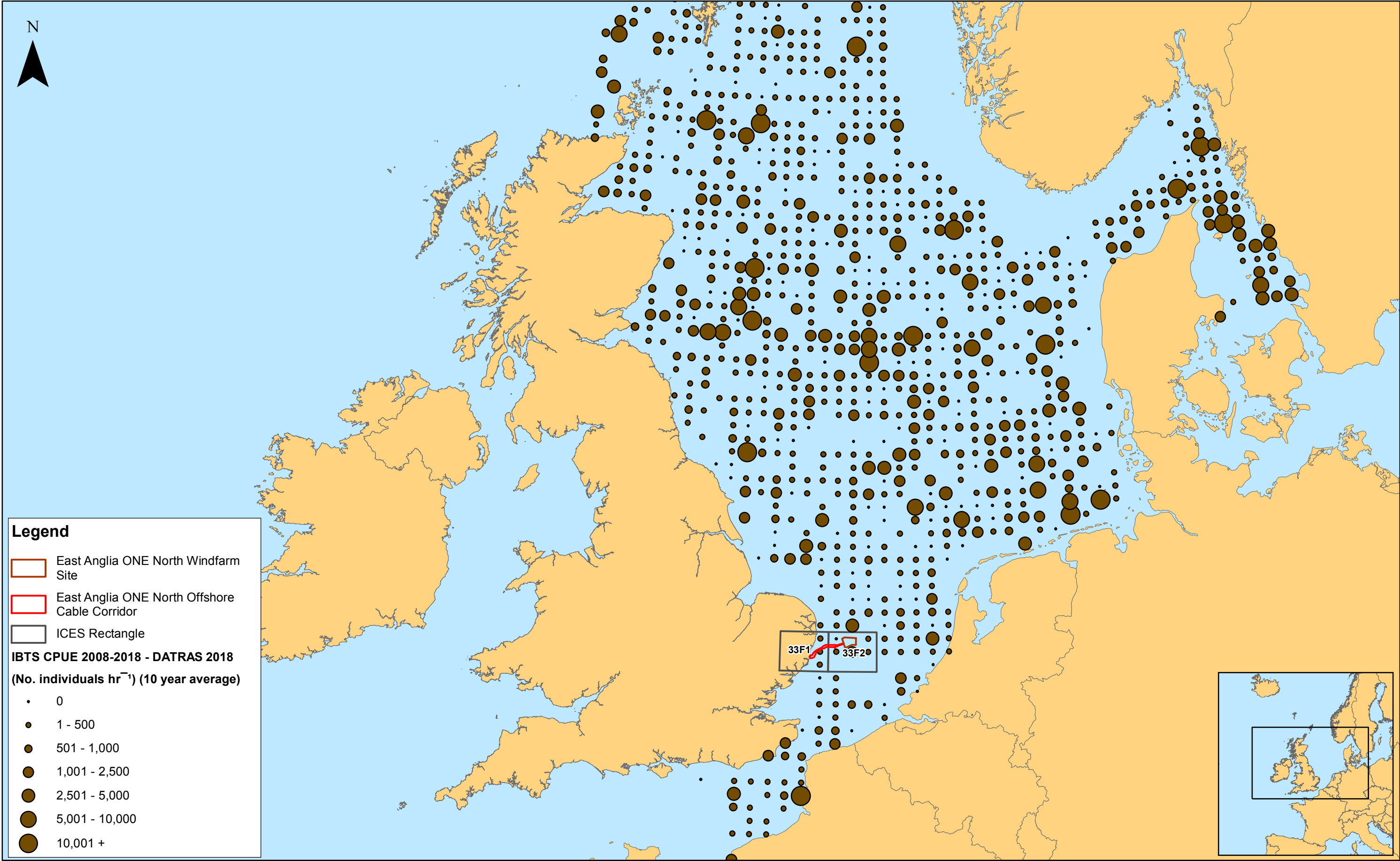
East Anglia ONE North


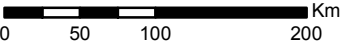
IHLS Herring Small Larvae Abundance (2011 - 2014)

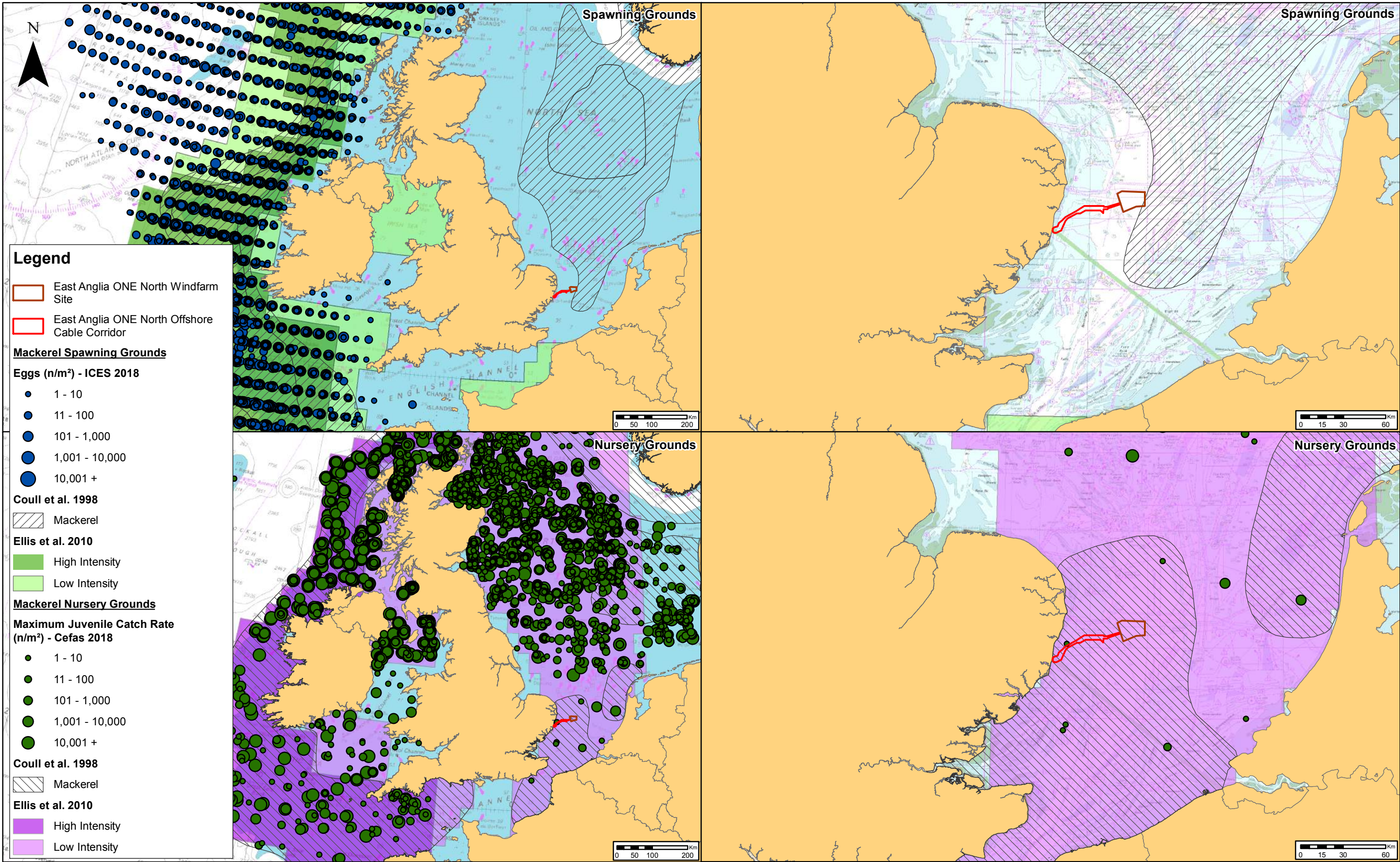
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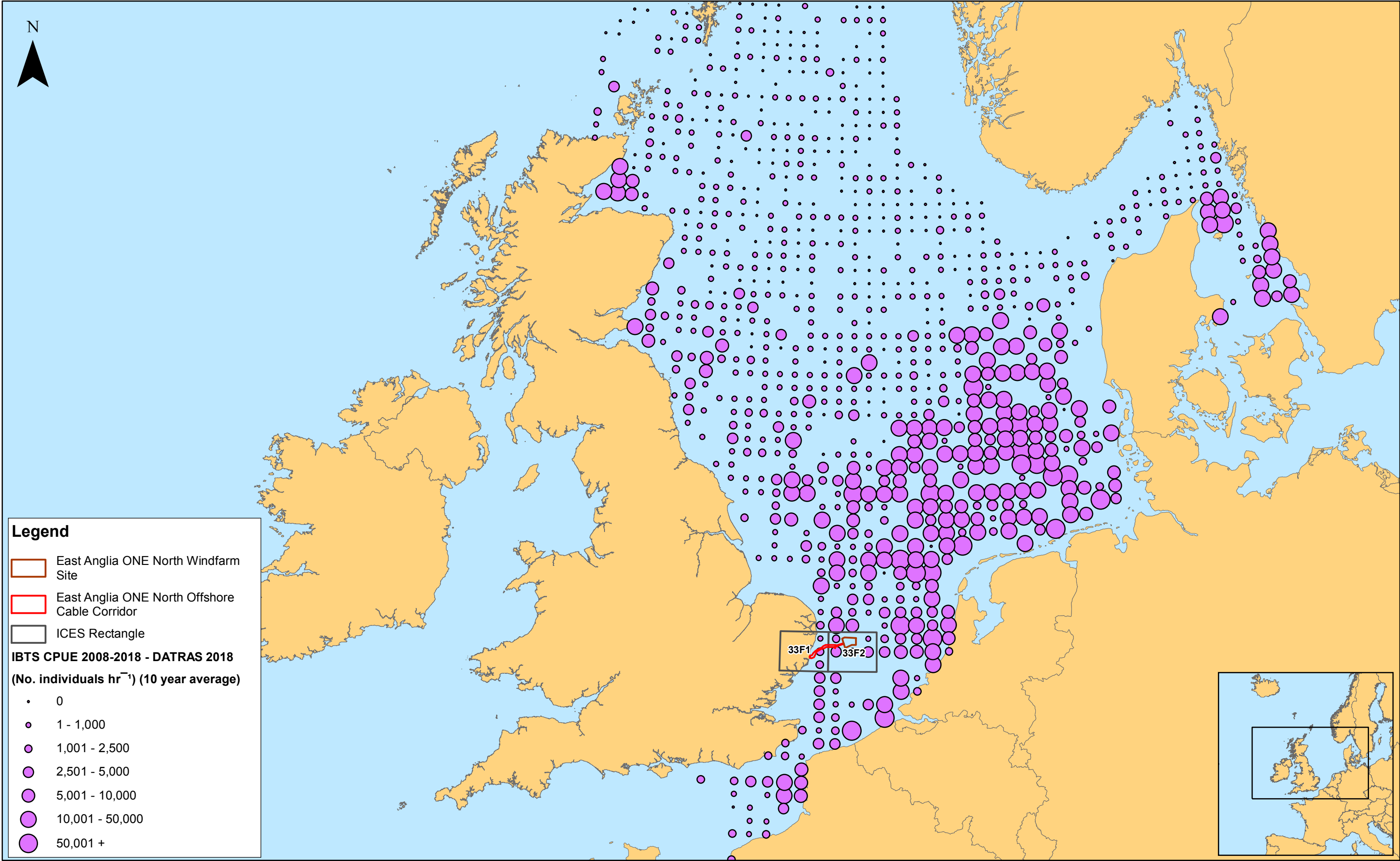
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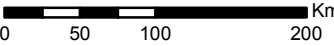


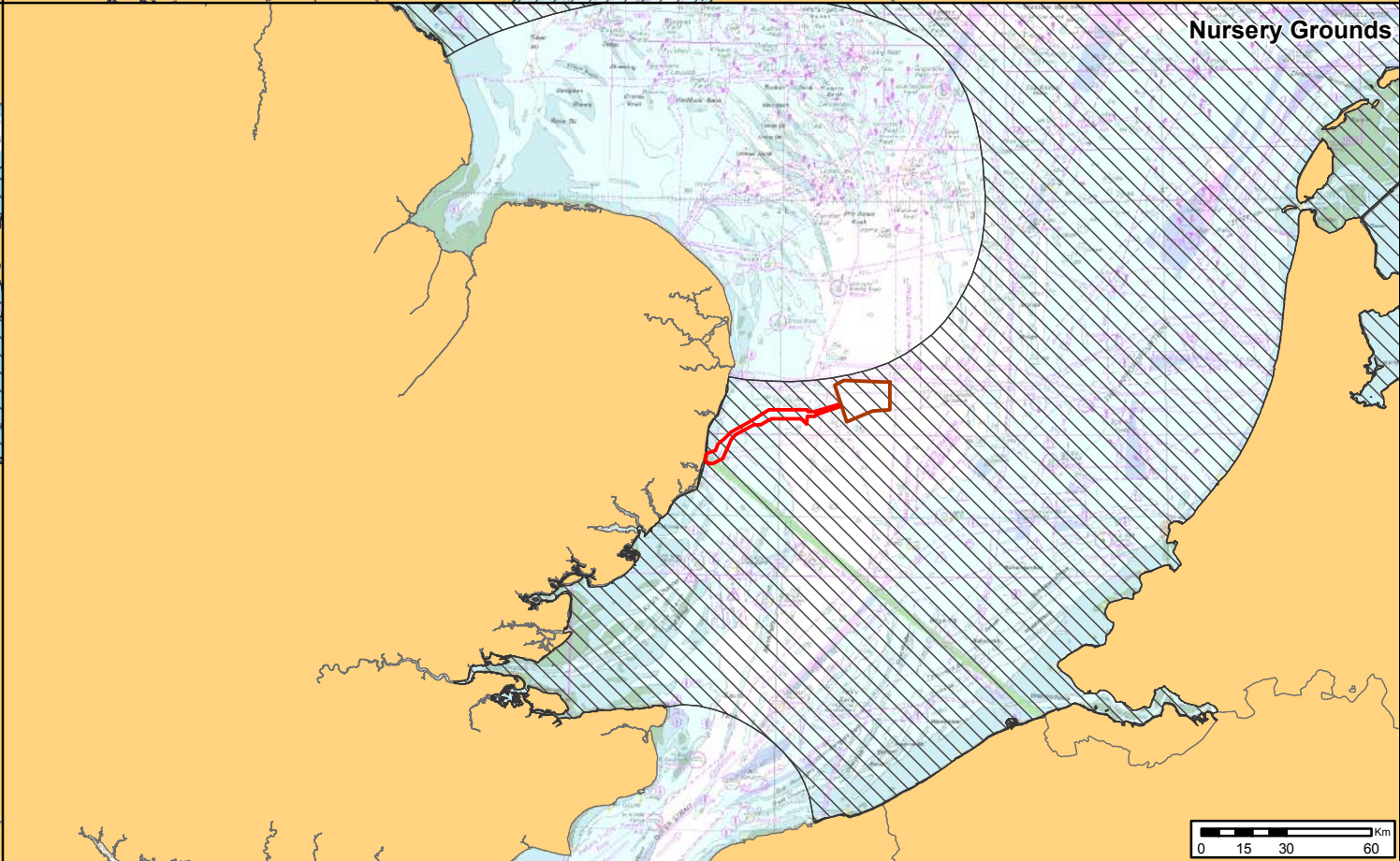
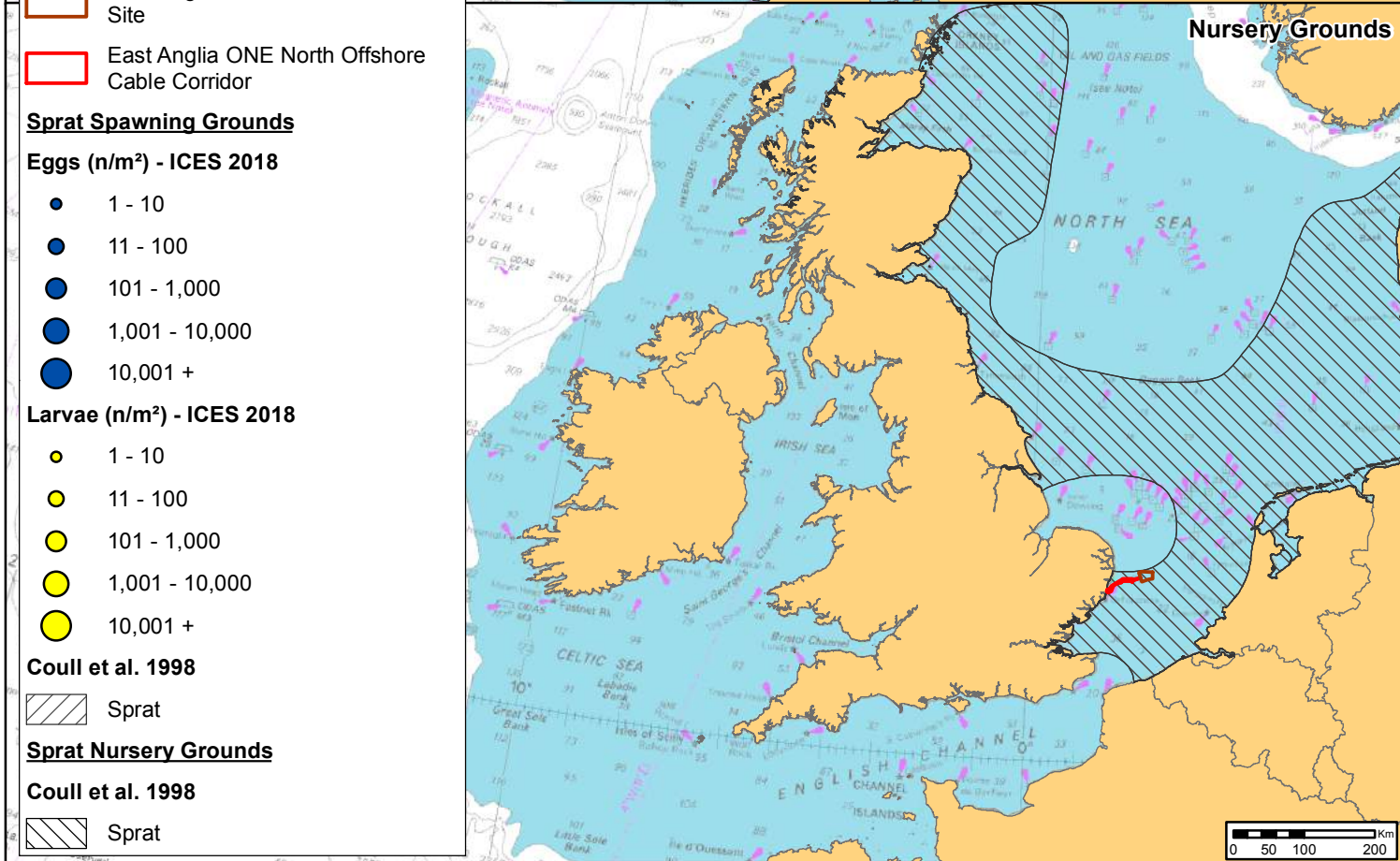
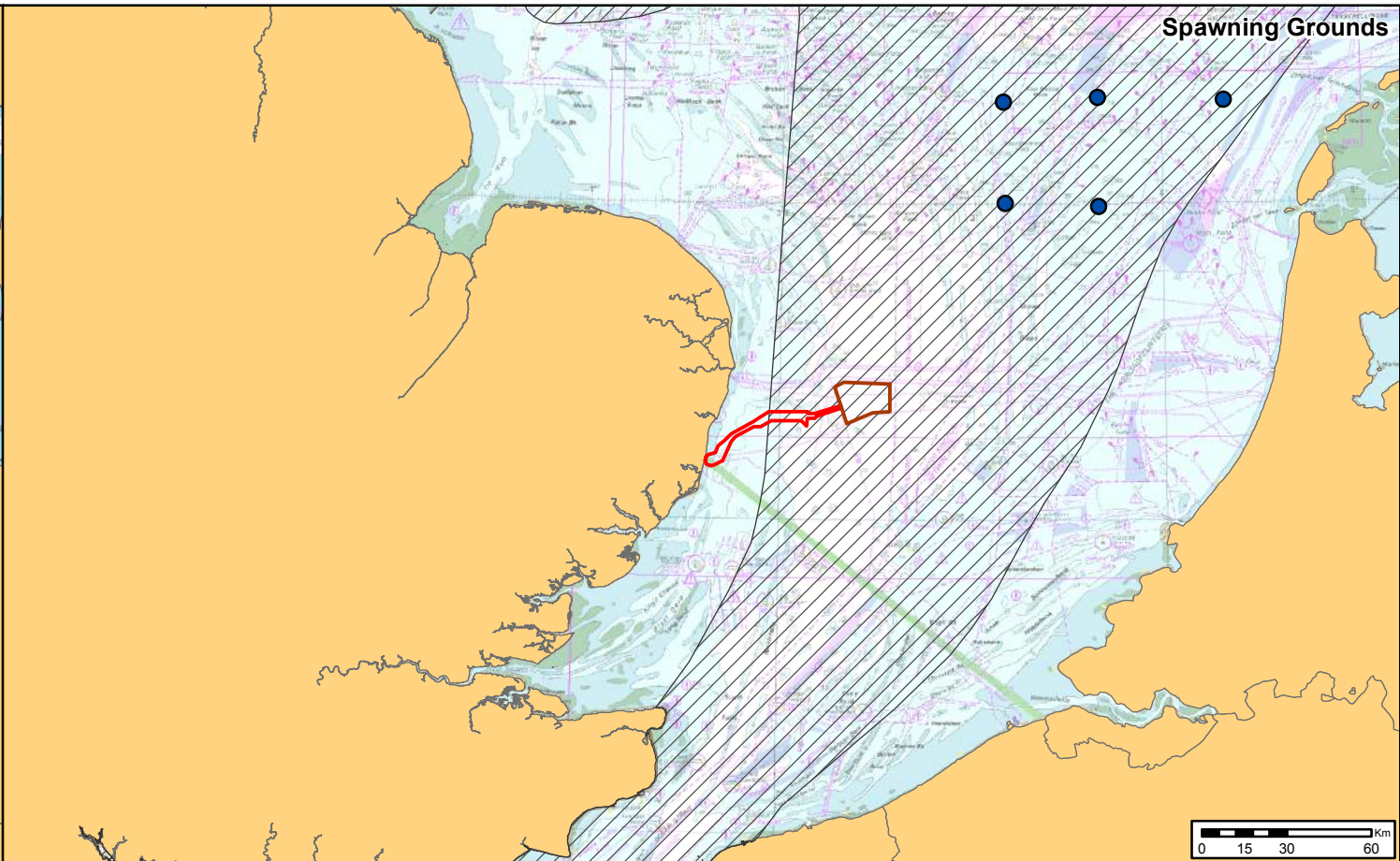
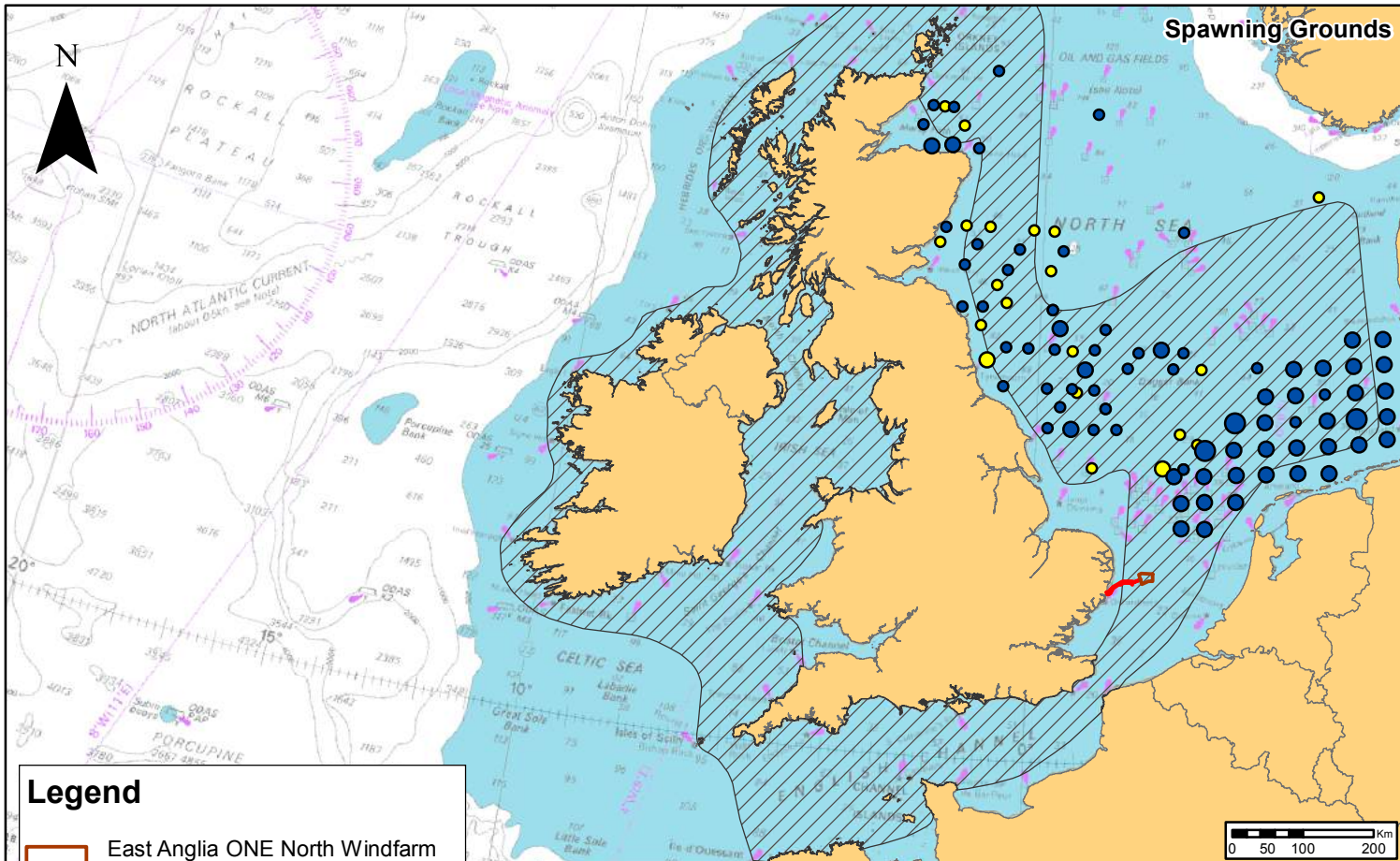
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	1	19/11/2018	FC	First Issue.	Checked:	KC		<small>Source: © ICES Database of Trawl Surveys (Datras), 2018. © The Crown Estate, 2018. Charts from MarineFIND.co.uk Licence No EK001-0645-MF0095. Not to be used for navigation. This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Offshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.</small>		Date	19/11/18	
	Rev	Date	By	Comment	Approved:	PP				Figure	10.18	




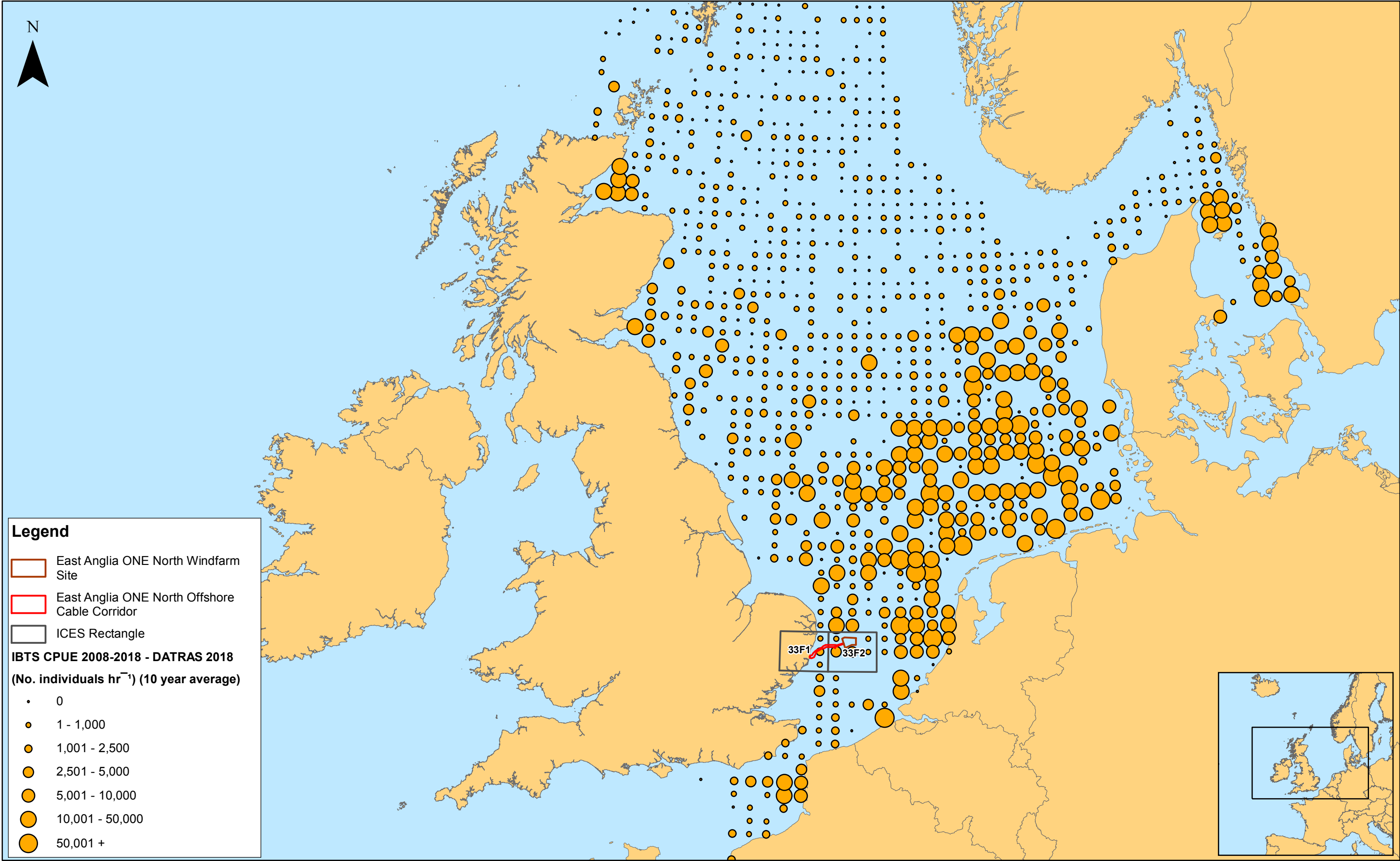
							Scale @ A3	<p>East Anglia ONE North</p> <p>Mackerel Spawning and Nursery Grounds (Coull et al., 1998 and Ellis et al., 2010)</p> <p><small>Source: © Cefas, 2018. © ICES International Herring Larvae Survey, 2018. © The Crown Estate, 2018. Charts from MarineFIND.co.uk Licence No EK001-0645-MF0095. Not to be used for navigation.</small></p> <p><small>This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Offshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.</small></p>	<p>Drg No</p> <p>Rev</p> <p>Date</p> <p>Figure</p>	<p>EA1N-DEV-DRG-IBR-000328</p> <p>1</p> <p>19/11/18</p> <p>10.19</p>	<p>Datum: WGS 1984 Projection: Zone 31N</p>
				Prepared: FC							
	1	19/11/2018	FC	First Issue.	Checked: KC						
	Rev	Date	By	Comment	Approved: PP						


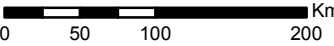


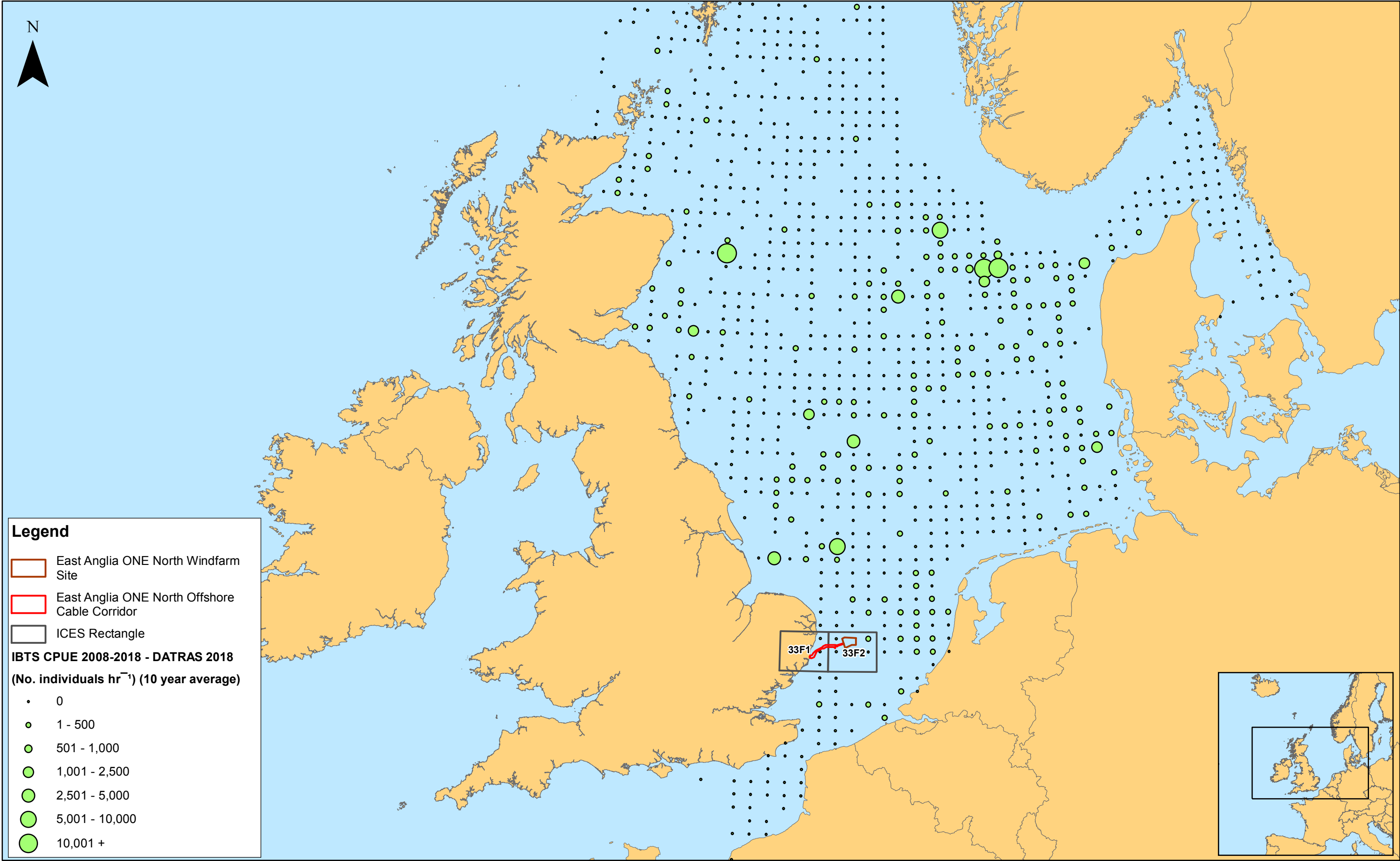
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					Prepared: FC				Rev	1	Datum: WGS 1984 Projection: Zone 31N
	1	19/11/2018	FC	First Issue.	Checked: KC	<small>Source: © ICES Database of Trawl Surveys (Datras), 2018. © The Crown Estate, 2018. Charts from MarineFIND.co.uk Licence No EK001-0645-MF0095. Not to be used for navigation. This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Offshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.</small>			Date	19/11/18	
	Rev	Date	By	Comment	Approved: PP		Figure		10.20		


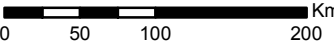


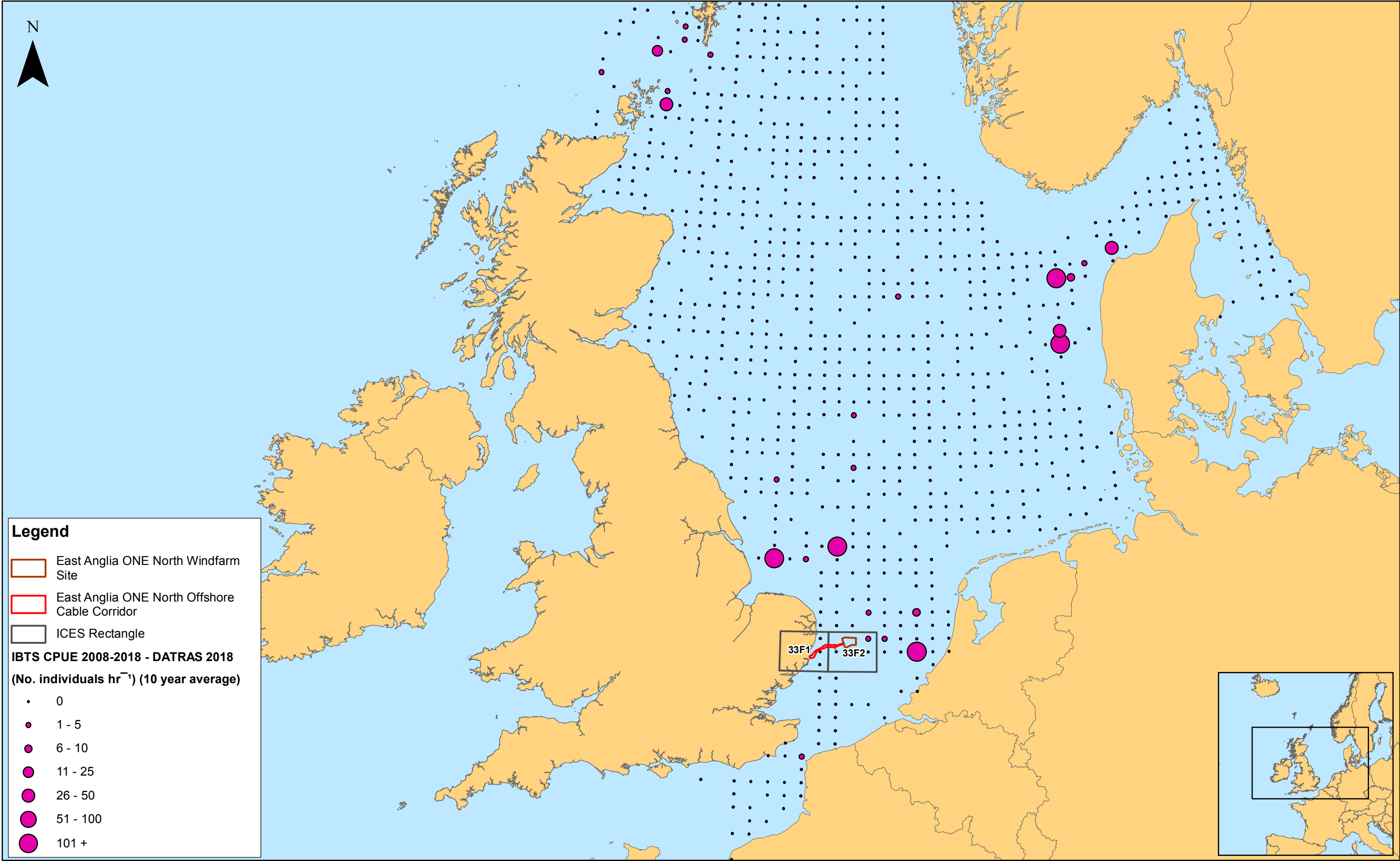
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					Prepared:	FC	Scale @ A3				Rev	1	Datum: WGS 1984 Projection: Zone 31N
	1	19/11/2018	FC	First Issue.	Checked:	KC	Source: © Cefas, 2018. © ICES International Herring Larvae Survey, 2018. © The Crown Estate, 2018. Charts from MarineFIND.co.uk Licence No EK001-0645-MF0095. Not to be used for navigation.				Date	19/11/18	
	Rev	Date	By	Comment	Approved:	PP	This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Offshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise) in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.				Figure	10.21	





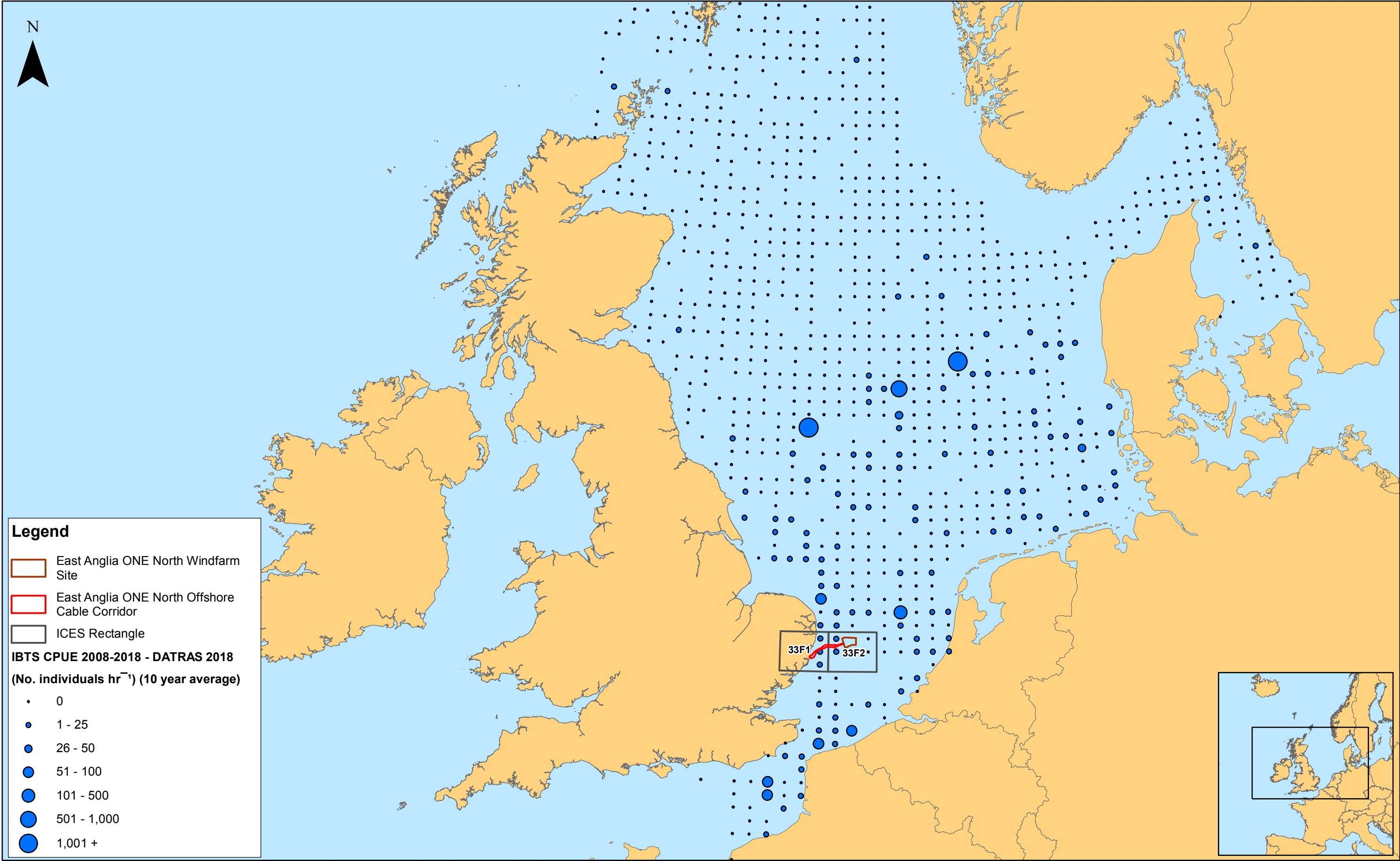
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				Prepared:	FC	Scale @ A3			Rev	1	Datum: WGS 1984 Projection: Zone 31N
	1	19/11/2018	FC	First Issue.	Checked:	KC	<small>Source: © ICES Database of Trawl Surveys (Dattras), 2018. © The Crown Estate, 2018. Charts from MarineFIND.co.uk Licence No EK001-0645-MF0095. Not to be used for navigation. This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Offshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.</small>				
	Rev	Date	By	Comment	Approved:	PP				Date	
								Figure	10.22		



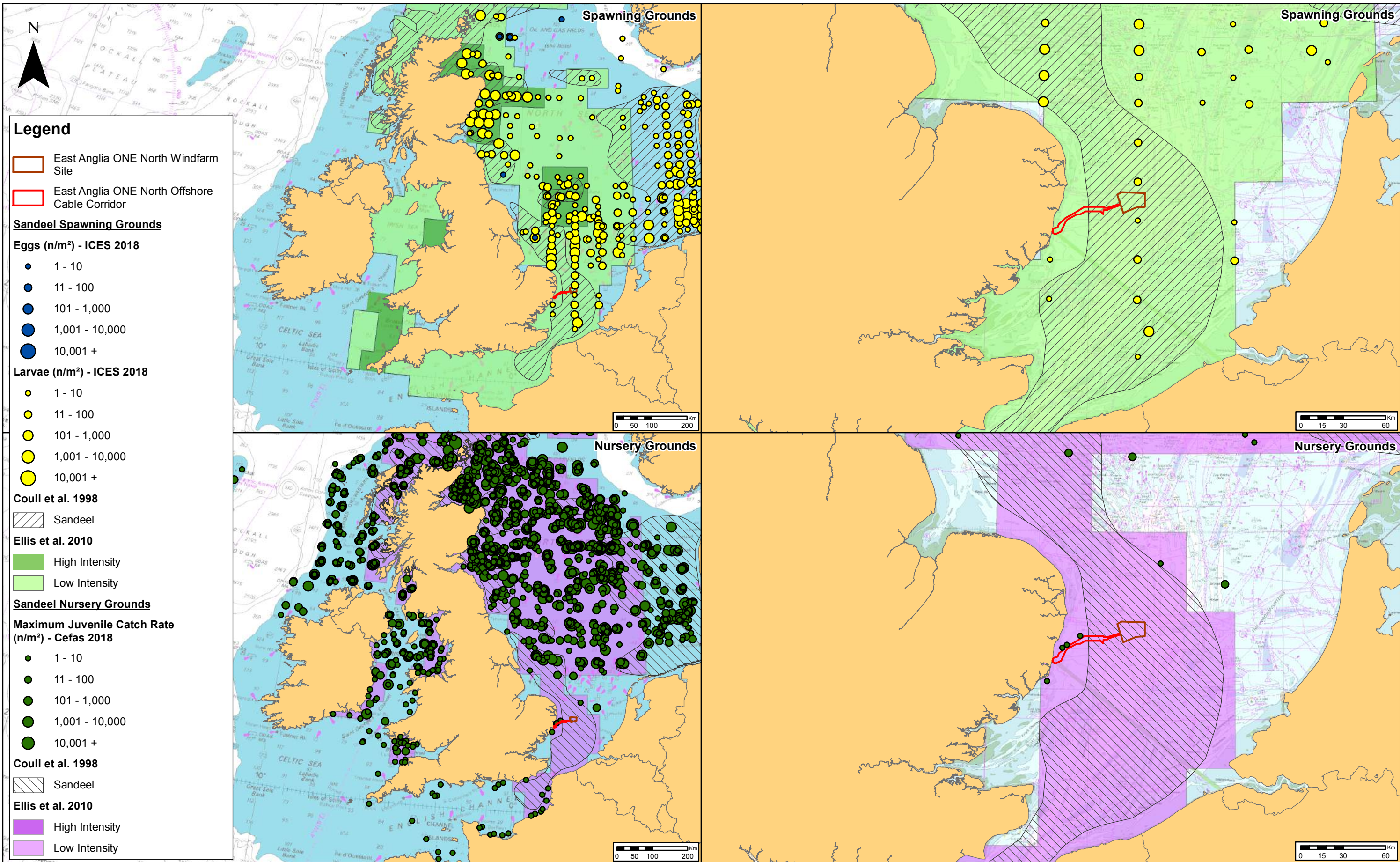
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	1	19/11/2018	FC	First Issue.	Checked:	KC	<small>Source: © ICES Database of Trawl Surveys (Datras), 2018. © The Crown Estate, 2018. Charts from MarineFIND.co.uk Licence No EK001-0645-MF0095. Not to be used for navigation. This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Offshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.</small>				
	Rev	Date	By	Comment	Approved:	PP				Date	




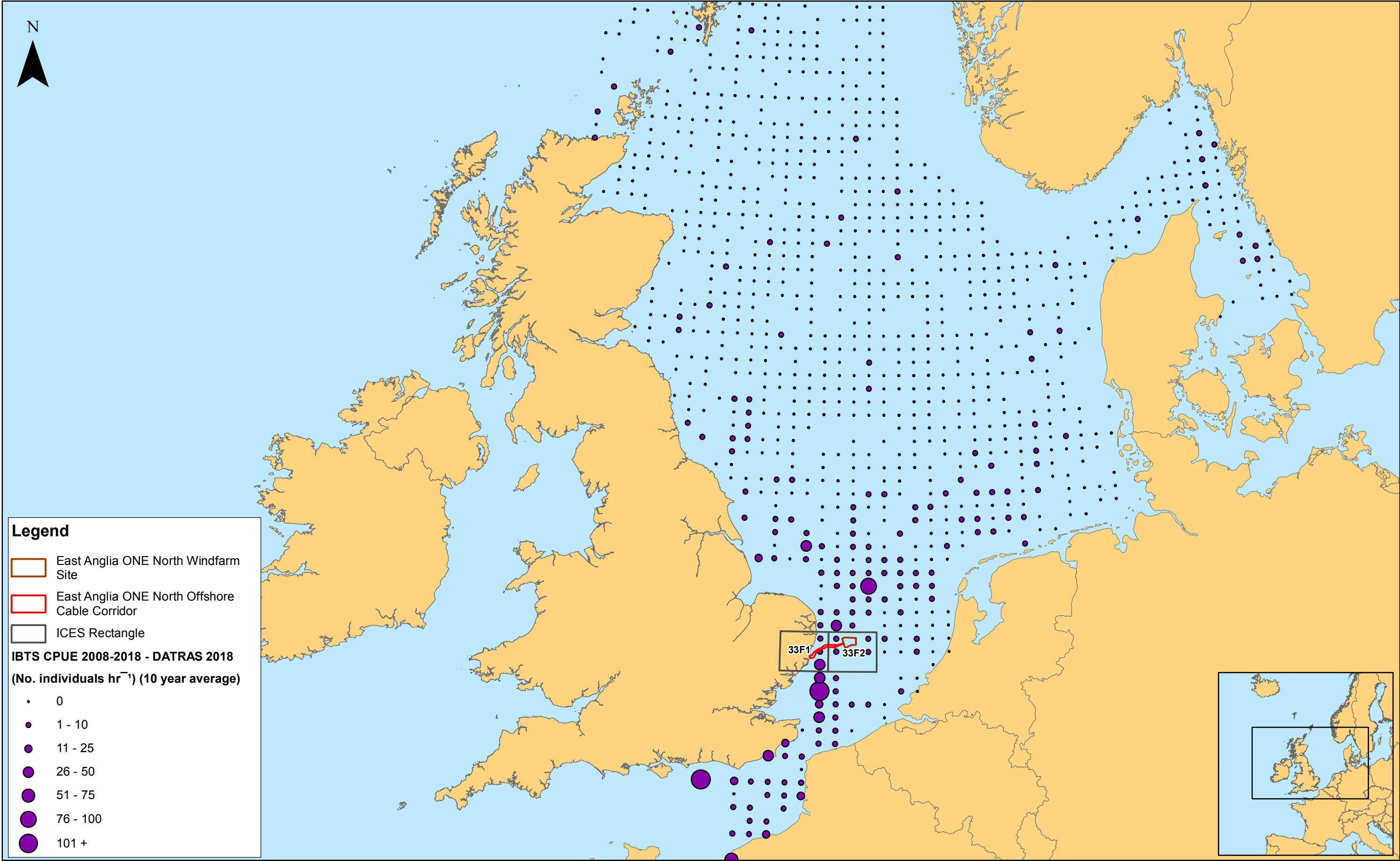
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					Prepared:	FC			Rev	1	Datum: WGS 1984 Projection: Zone 31N
	1	19/11/2018	FC	First Issue.	Checked:	KC	<small>Source: © ICES Database of Trawl Surveys (Datras), 2018. © The Crown Estate, 2018. Charts from MarineFIND.co.uk Licence No EK001-0645-MF0095. Not to be used for navigation.</small> <small>This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Offshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.</small>		Date	19/11/18	
	Rev	Date	By	Comment	Approved:	PP			Figure	10.24	


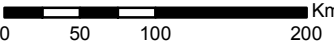


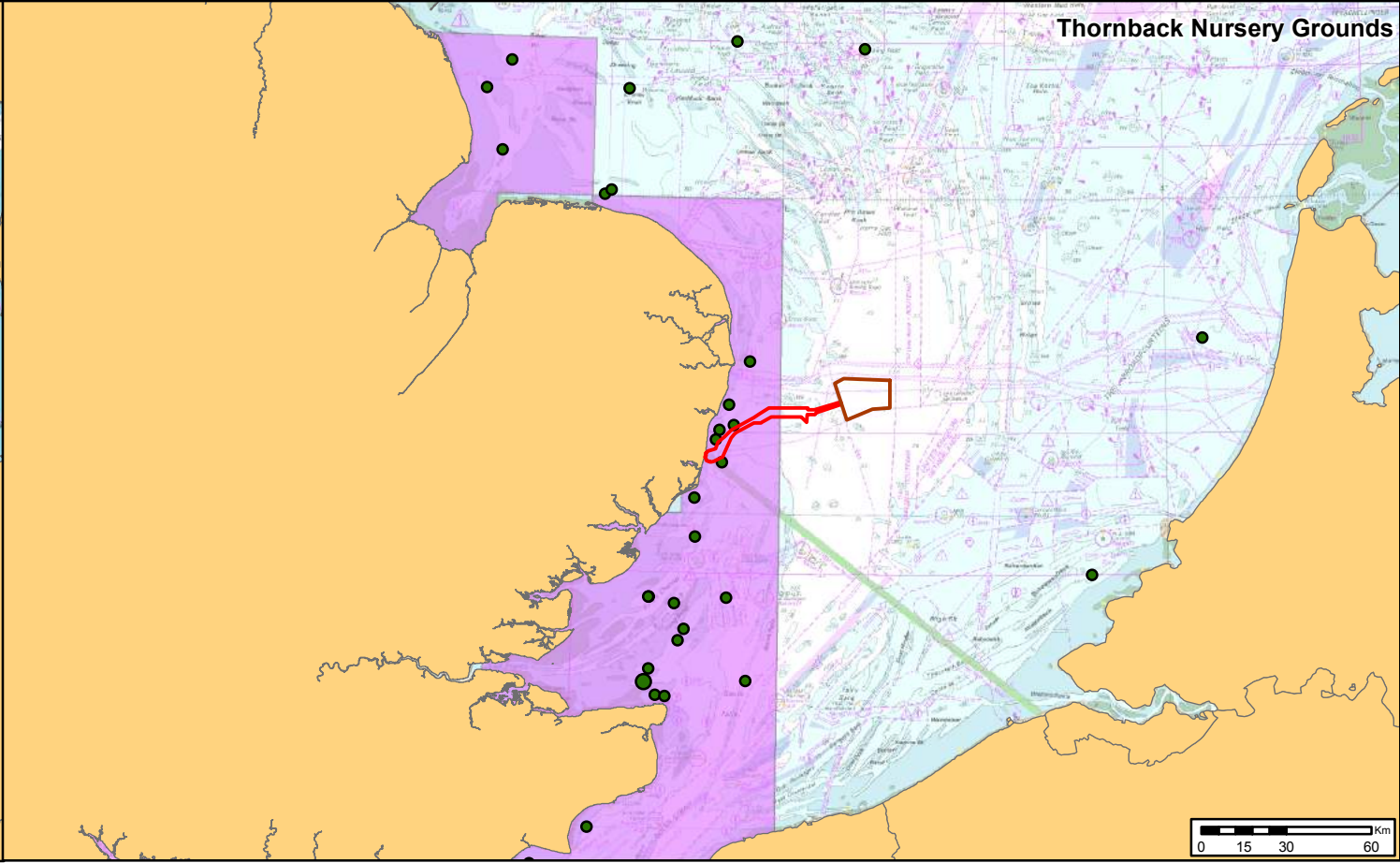
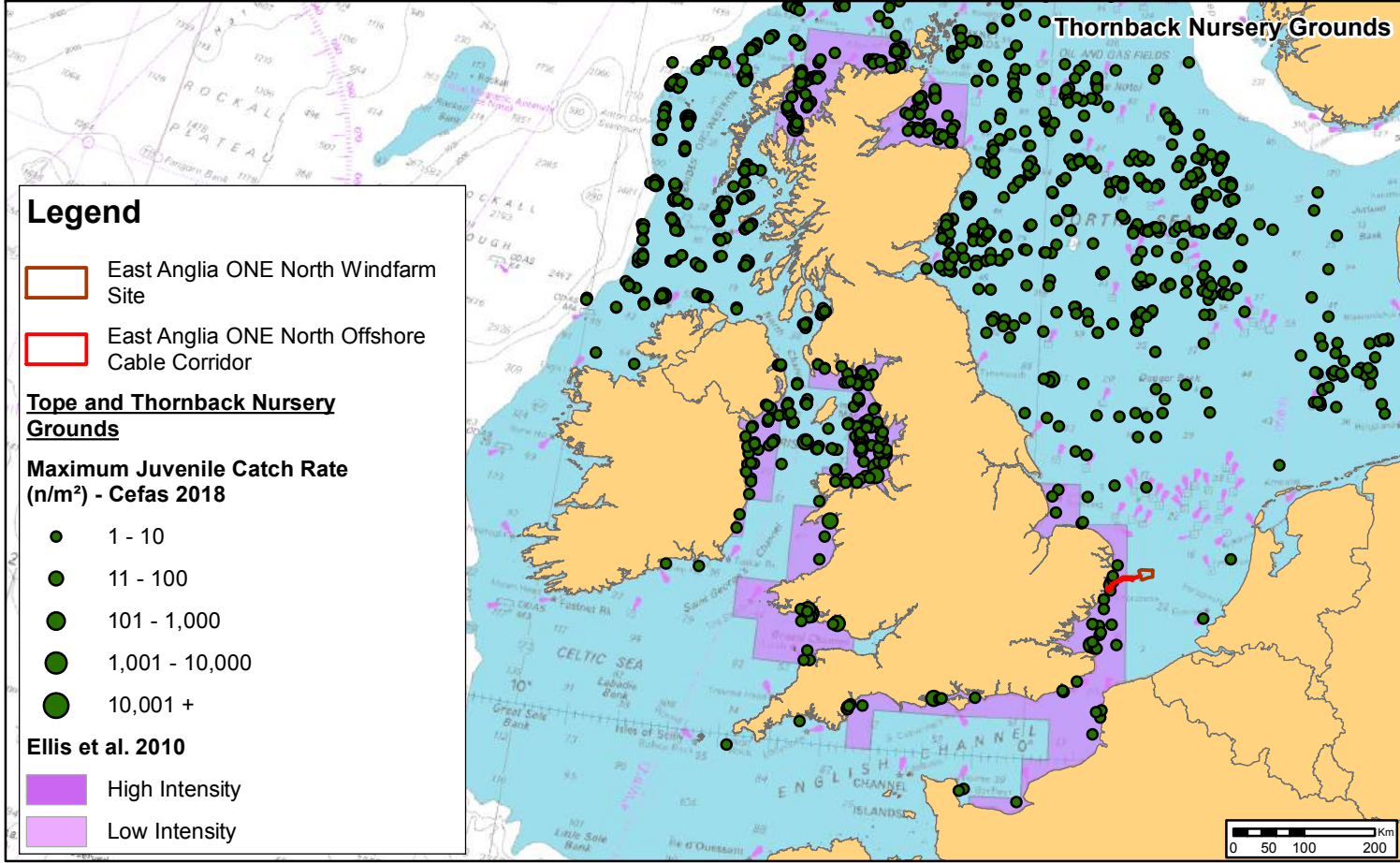
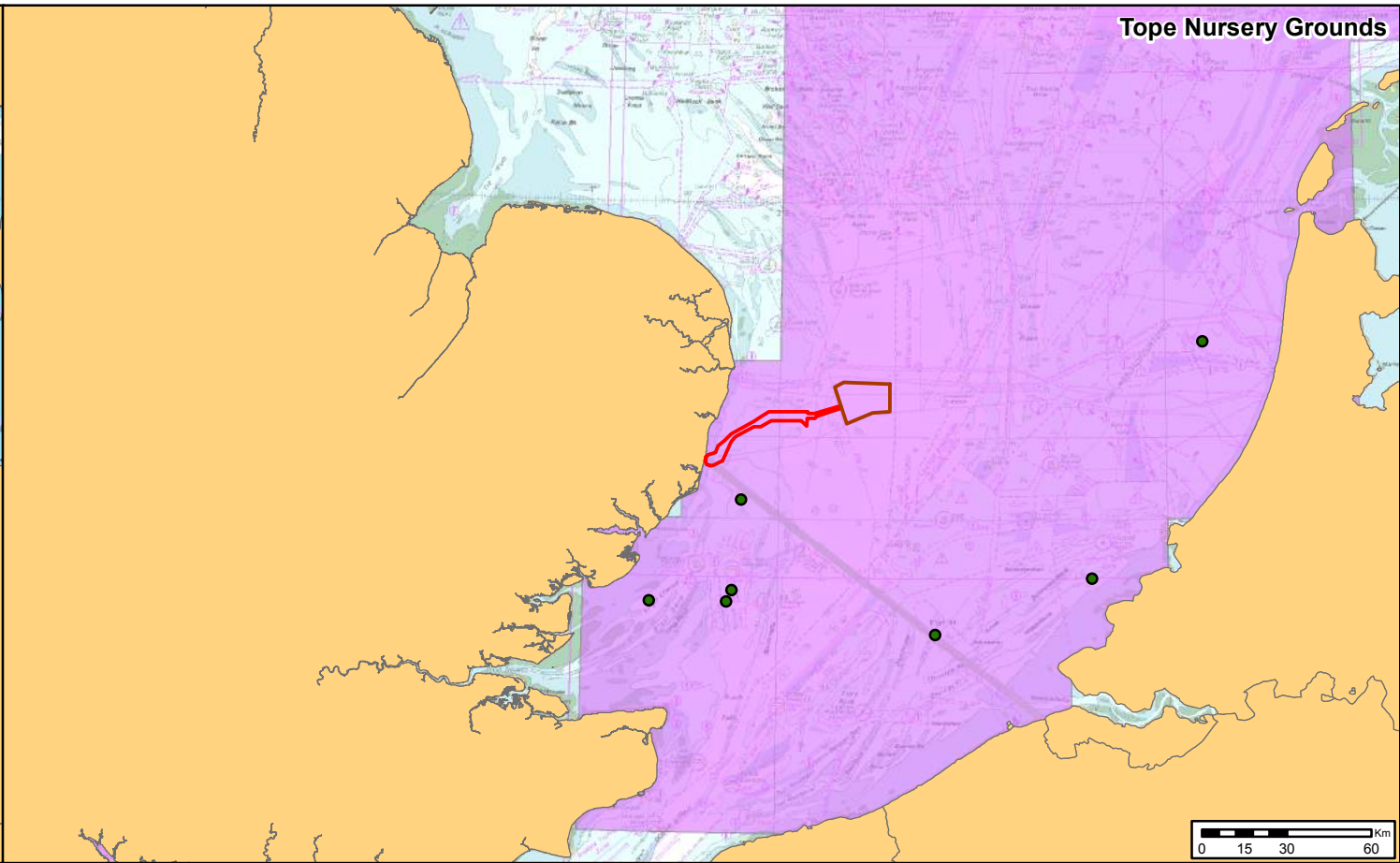
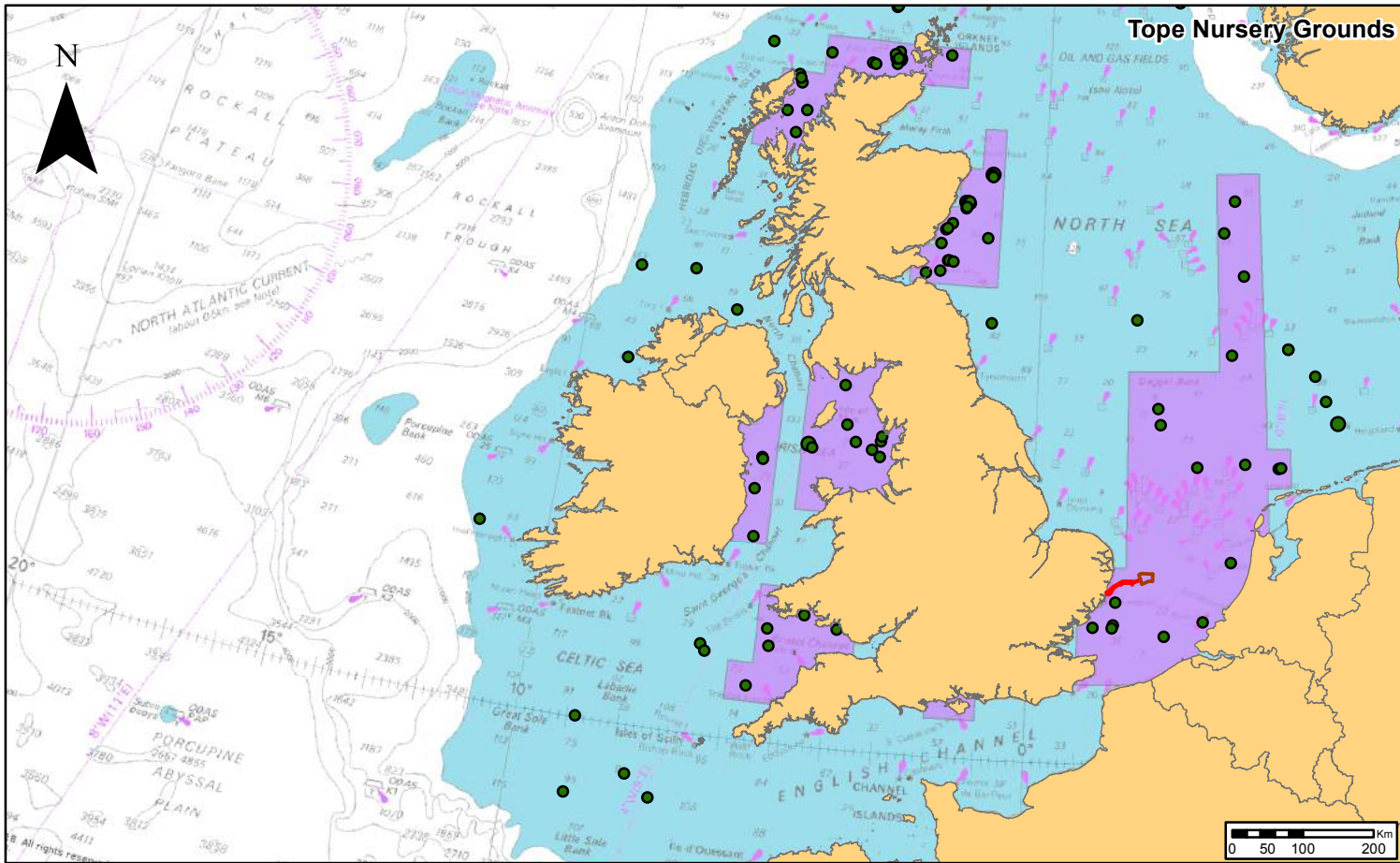
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				Prepared:	FC		
	1	19/11/2018	FC	First Issue.	Checked:	KC	
	Rev	Date	By	Comment	Approved:	PP	



										East Anglia ONE North Sandeel Spawning and Nursery Grounds (Coull et al., 1998 and Ellis et al., 2010)	Drg No	EA1N-DEV-DRG-IBR-000335	
					Prepared:	FC	Scale @ A3				Rev	1	Datum: WGS 1984 Projection: Zone 31N
	1	19/11/2018	FC	First Issue.	Checked:	KC	Source: © Cefas, 2018. © ICES International Herring Larvae Survey, 2018. © The Crown Estate, 2018. Charts from MarineFIND.co.uk Licence No EK001-0645-MF0095. Not to be used for navigation. This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPN Offshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.				Date	19/11/18	
	Rev	Date	By	Comment	Approved:	PP					Figure	10.26	



						1:5,000,000		East Anglia ONE North Average Number (Catch per Standardised Haul) of Thornback Ray from IBTS Survey (2008 - 2018)		Drg No	EA1N-DEV-DRG-IBR-000336	
					Prepared:	FC				Rev	1	Datum: WGS 1984 Projection: Zone 31N
	1	19/11/2018	FC	First Issue.	Checked:	KC				Date	19/11/18	
	Rev	Date	By	Comment	Approved:	PP				Figure	10.27	



Legend

East Anglia ONE North Windfarm Site

East Anglia ONE North Offshore Cable Corridor

Tope and Thornback Nursery Grounds

Maximum Juvenile Catch Rate (n/m²) - Cefas 2018

1 - 10

11 - 100

101 - 1,000


1,001 - 10,000

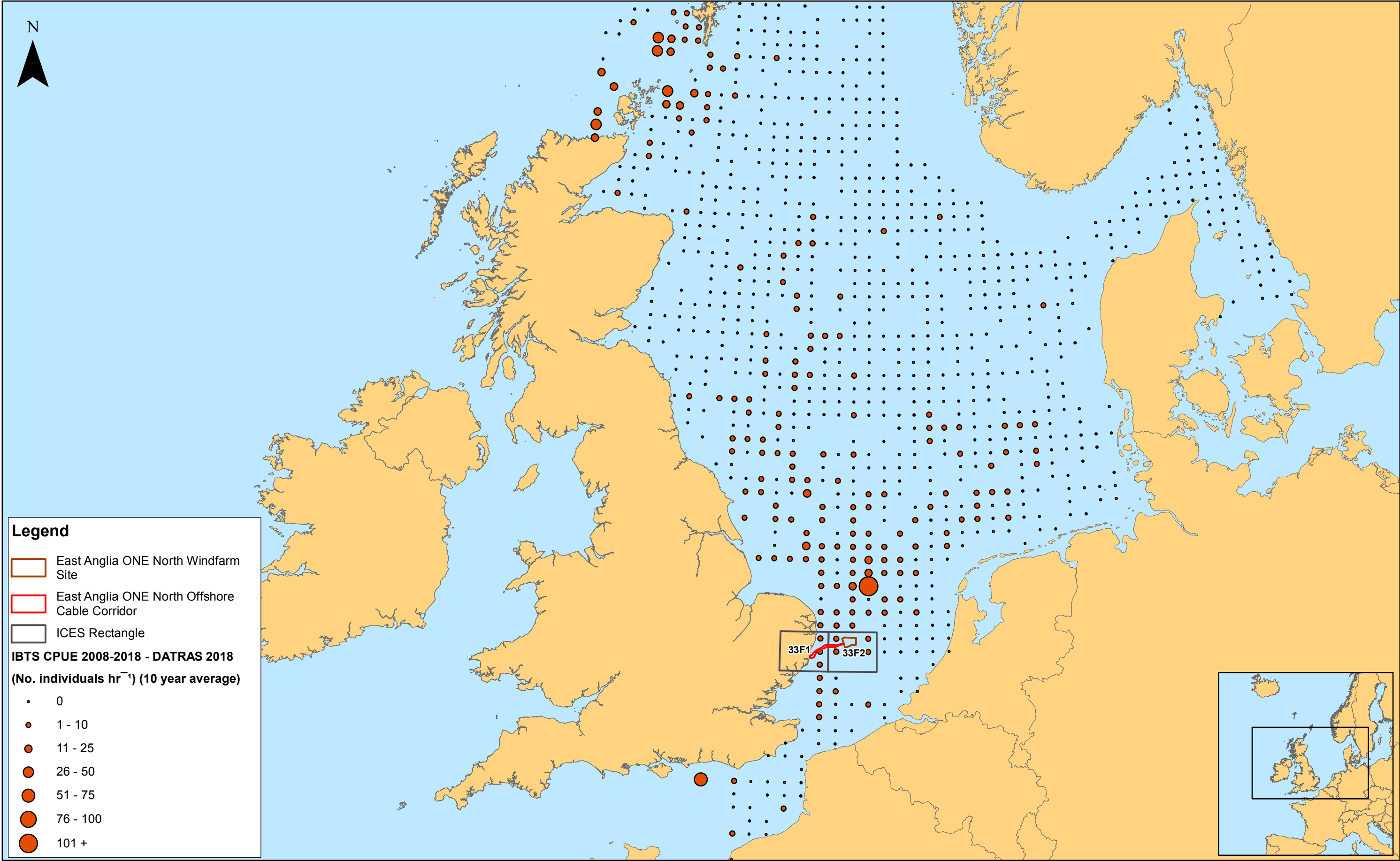
10,001 +


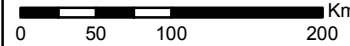
Ellis et al. 2010

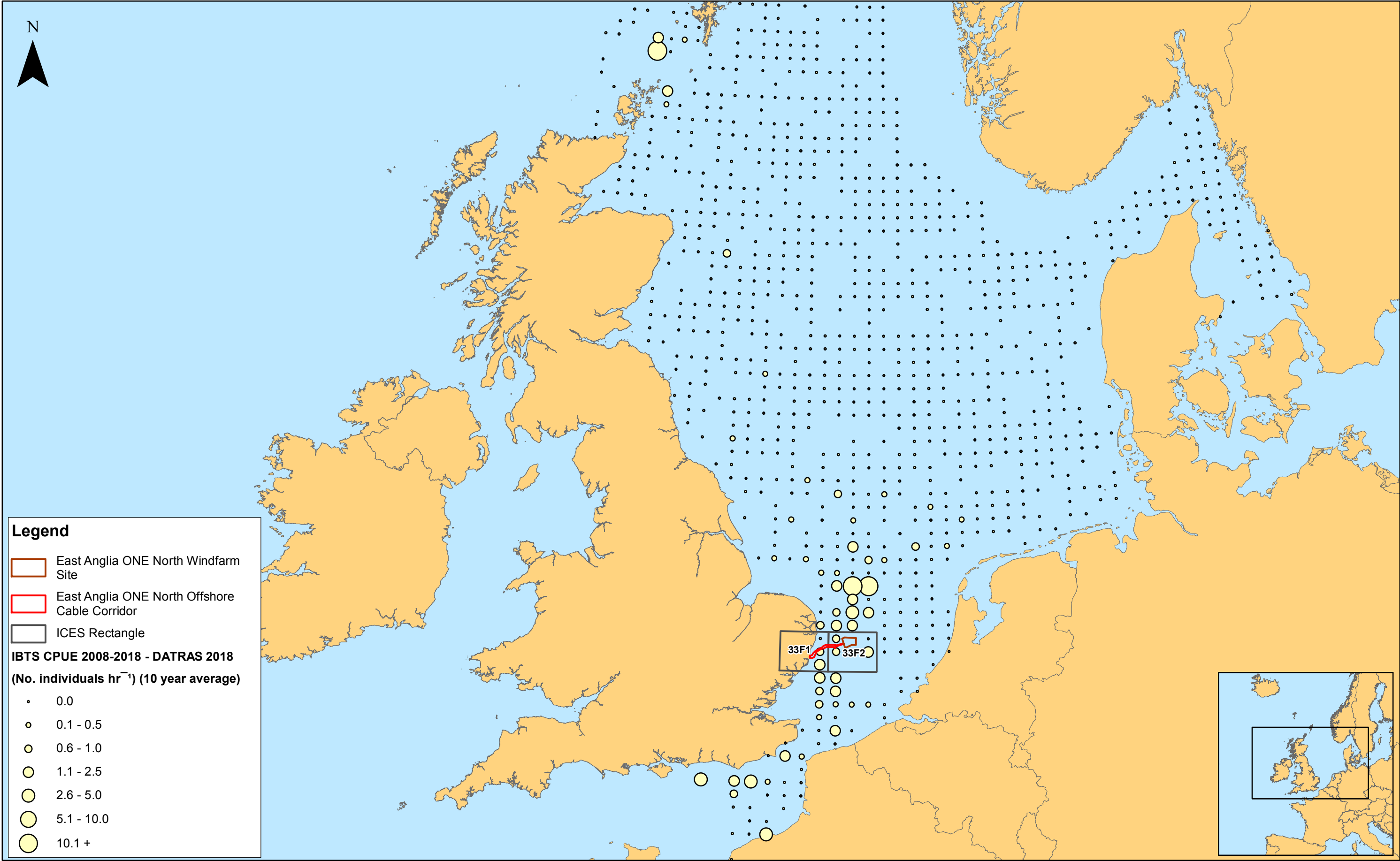
High Intensity


Low Intensity

 SCOTTISHPOWER RENEWABLES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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						1:5,000,000 Scale @ A3		East Anglia ONE North Average Number (Catch per Standardised Haul) of Spotted Ray from IBTS Survey (2008 - 2018)	Drg No	EA1N-DEV-DRG-IBR-000338		
					Prepared:	FC			Rev	1	Datum: WGS 1984 Projection: Zone 31N	
	1	19/11/2018	FC	First Issue.	Checked:	KC	<small>Source: © ICES Database of Trawl Surveys (Dattras), 2018. © The Crown Estate, 2018. Charts from MarineFIND.co.uk Licence No EK001-0645-MF0095. Not to be used for navigation.</small> <small>This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Offshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.</small>		Date	19/11/18		
	Rev	Date	By	Comment	Approved:	PP			Figure	10.29		





Rev	Date	By	Comment
1	19/11/2018	FC	First Issue.

Prepared:	Checked:	Approved:
FC	KC	PP

1:5,000,000
Scale @ A3

0

50

100

200

Km

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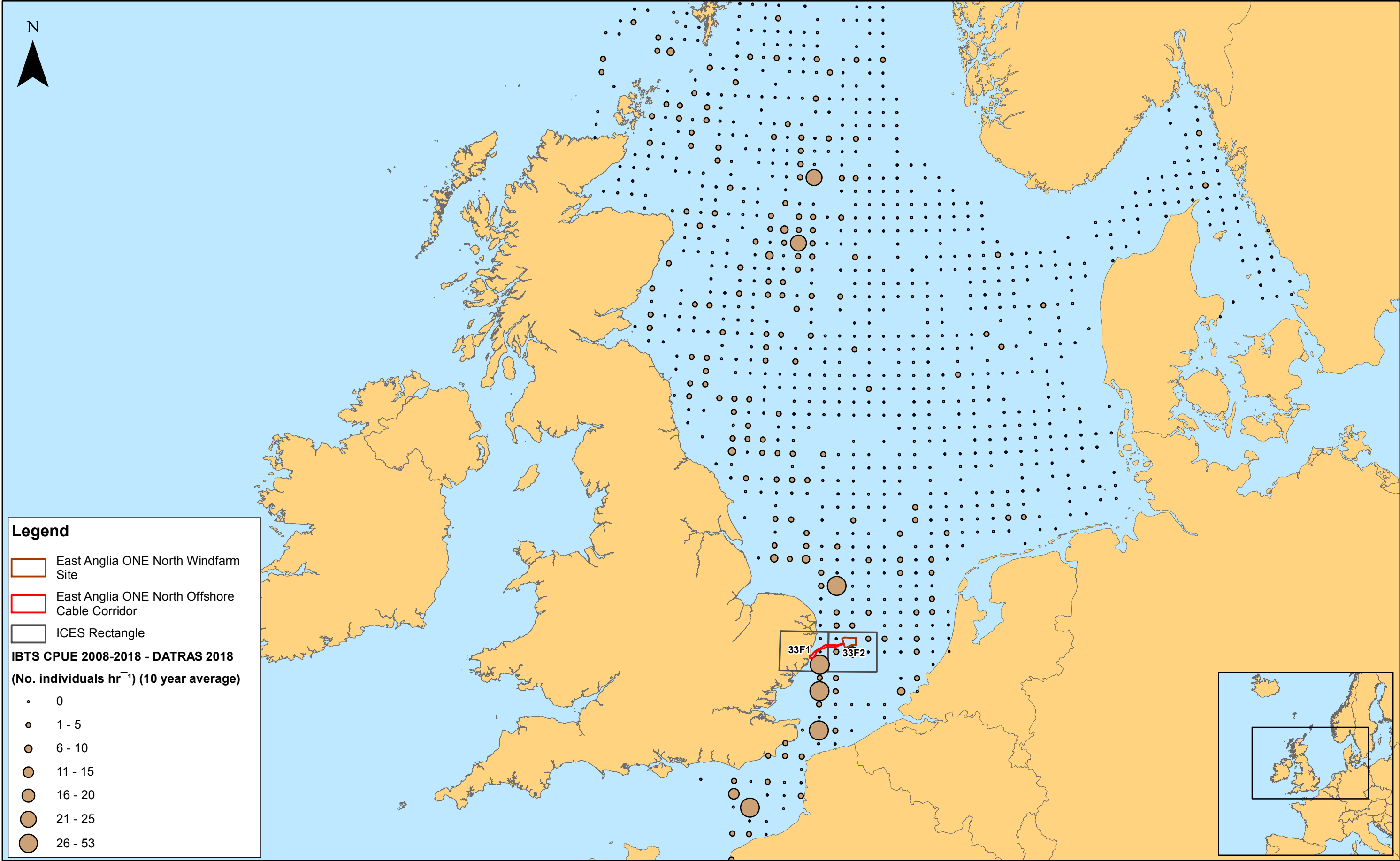
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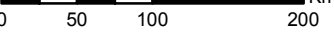
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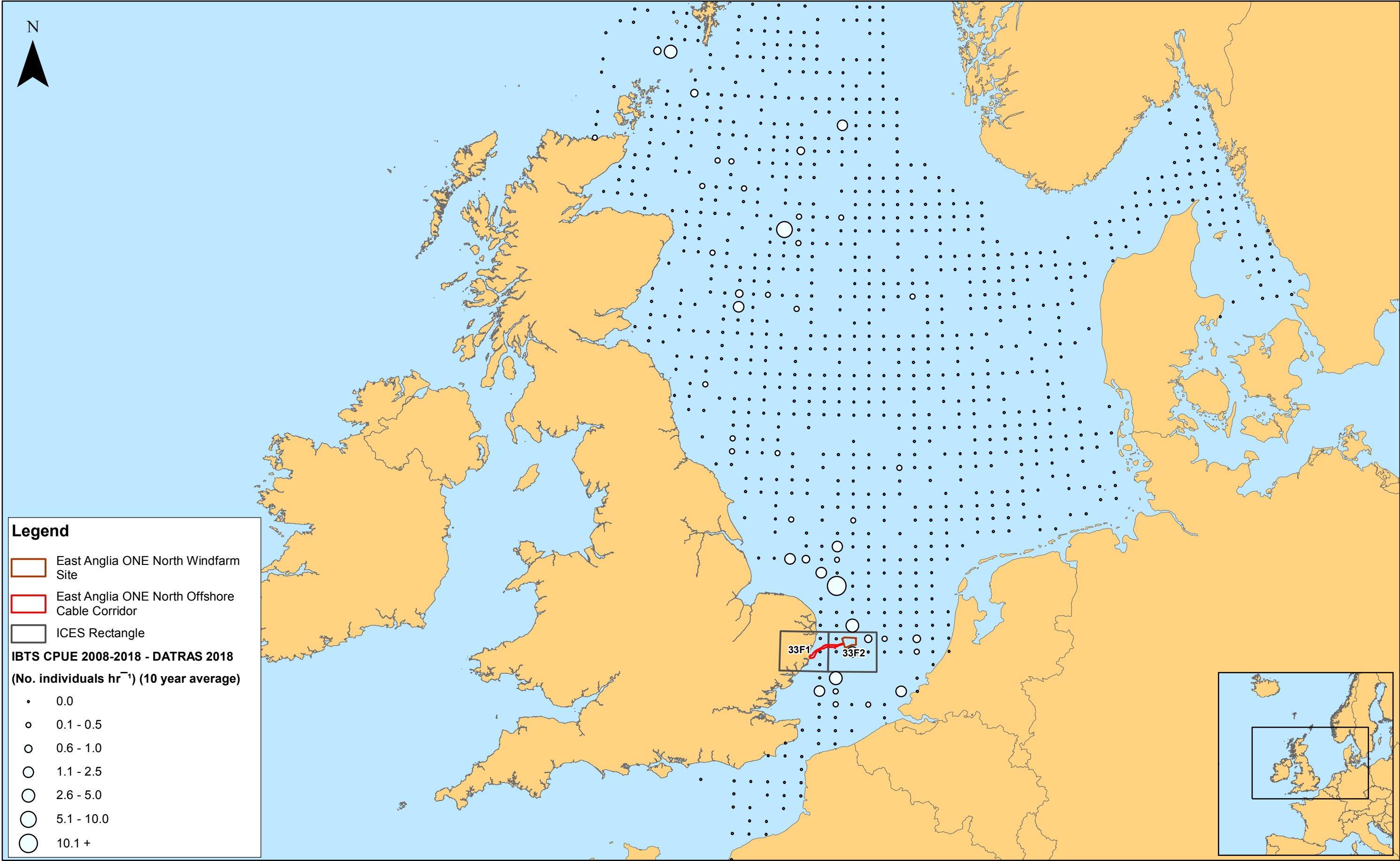
East Anglia ONE North
Average Number (Catch per Standardised Haul)
of Blonde Ray from IBTS Survey (2008 - 2018)


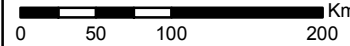
Drg No	Rev	Date	Figure
EA1N-DEV-DRG-IBR-000339	1	19/11/18	10.30

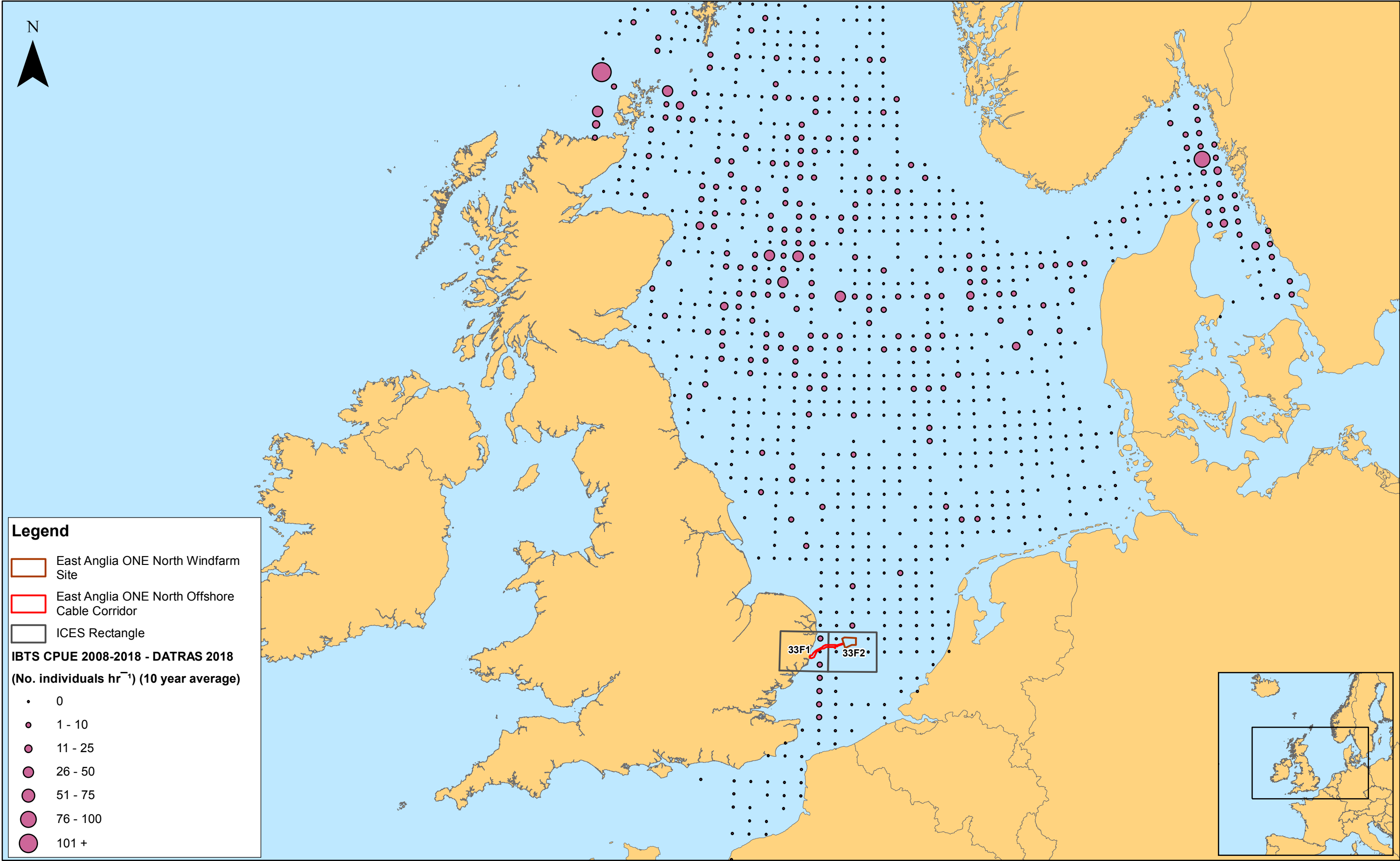
Datum:
WGS 1984
Projection:
Zone 31N





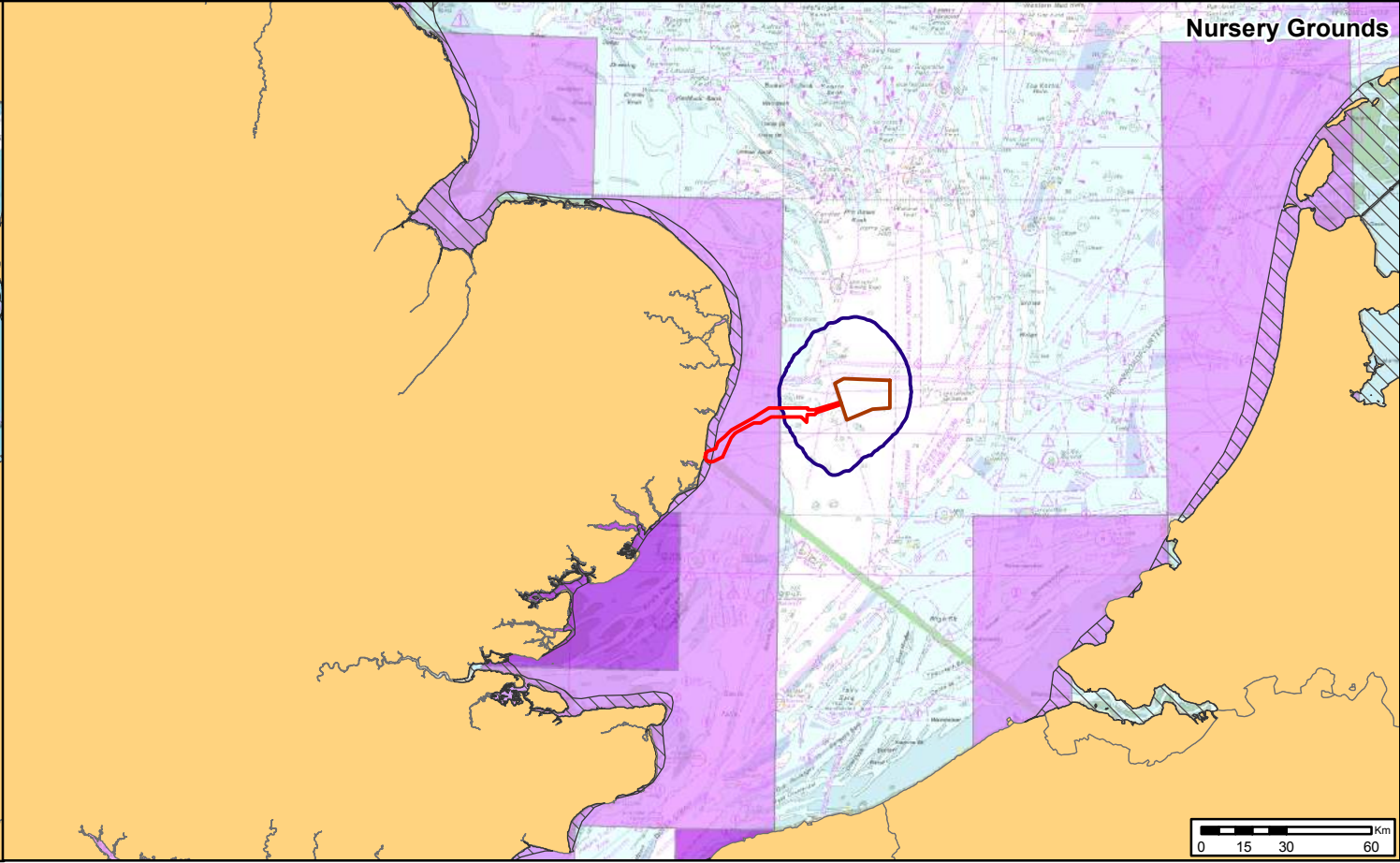
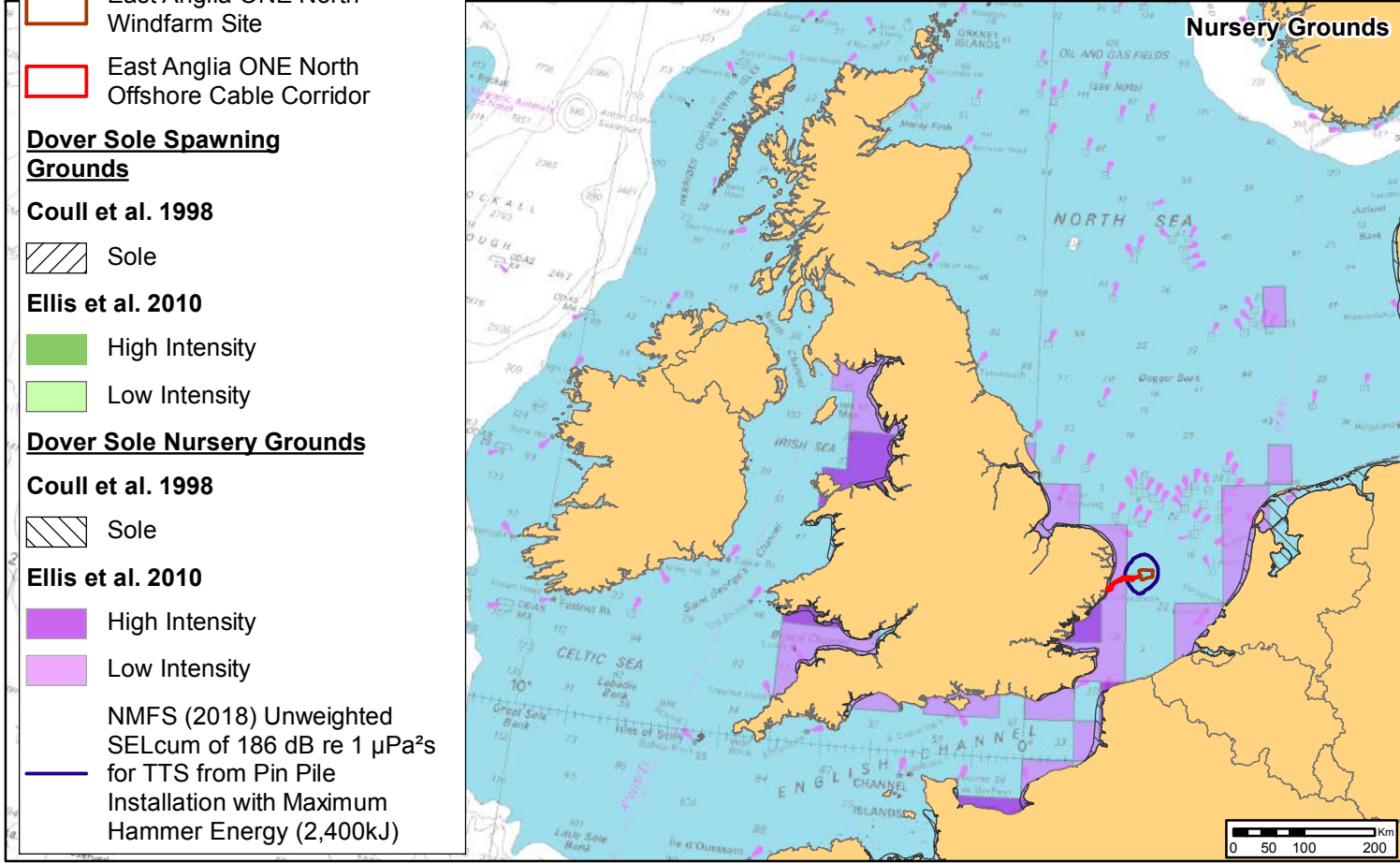
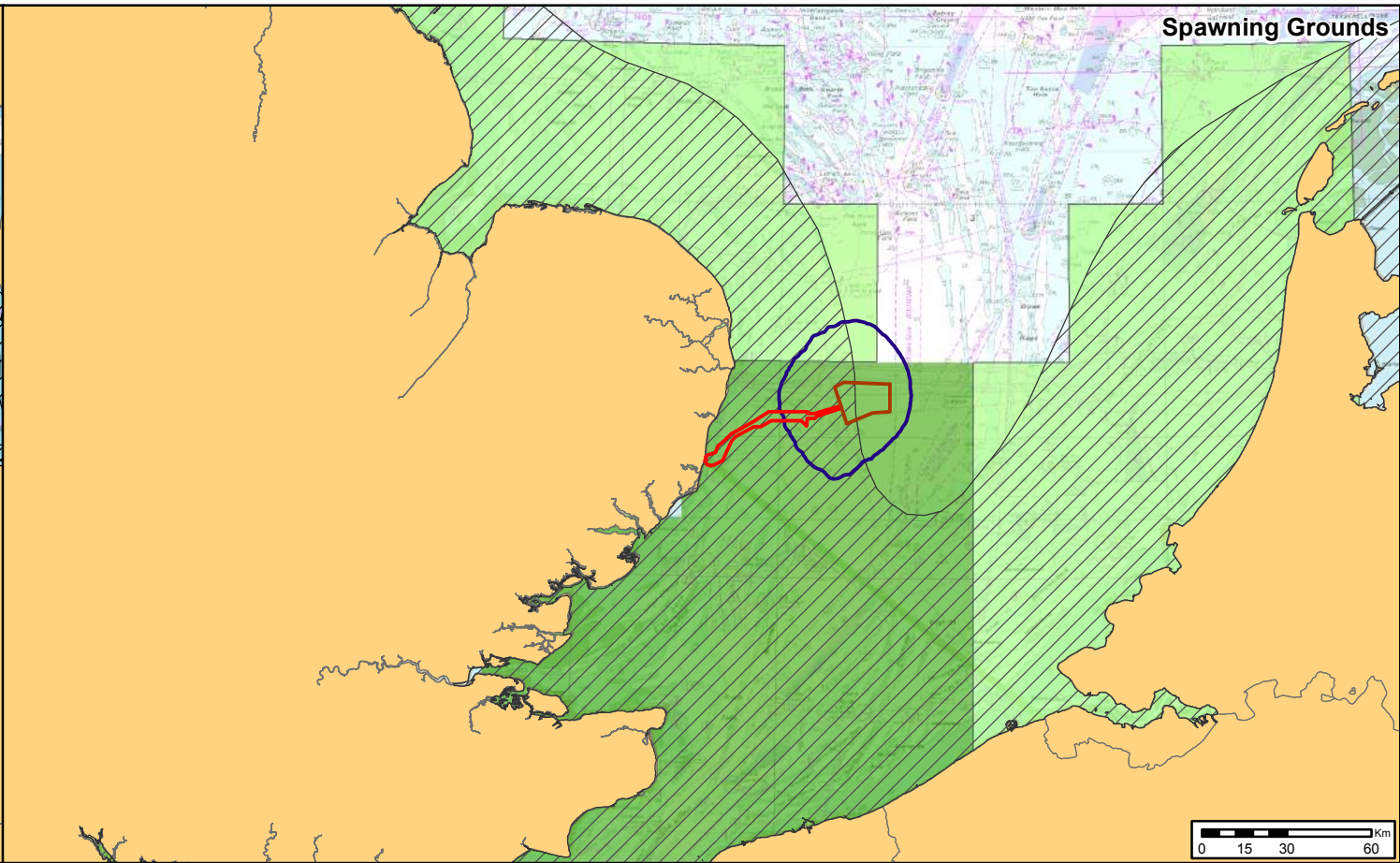
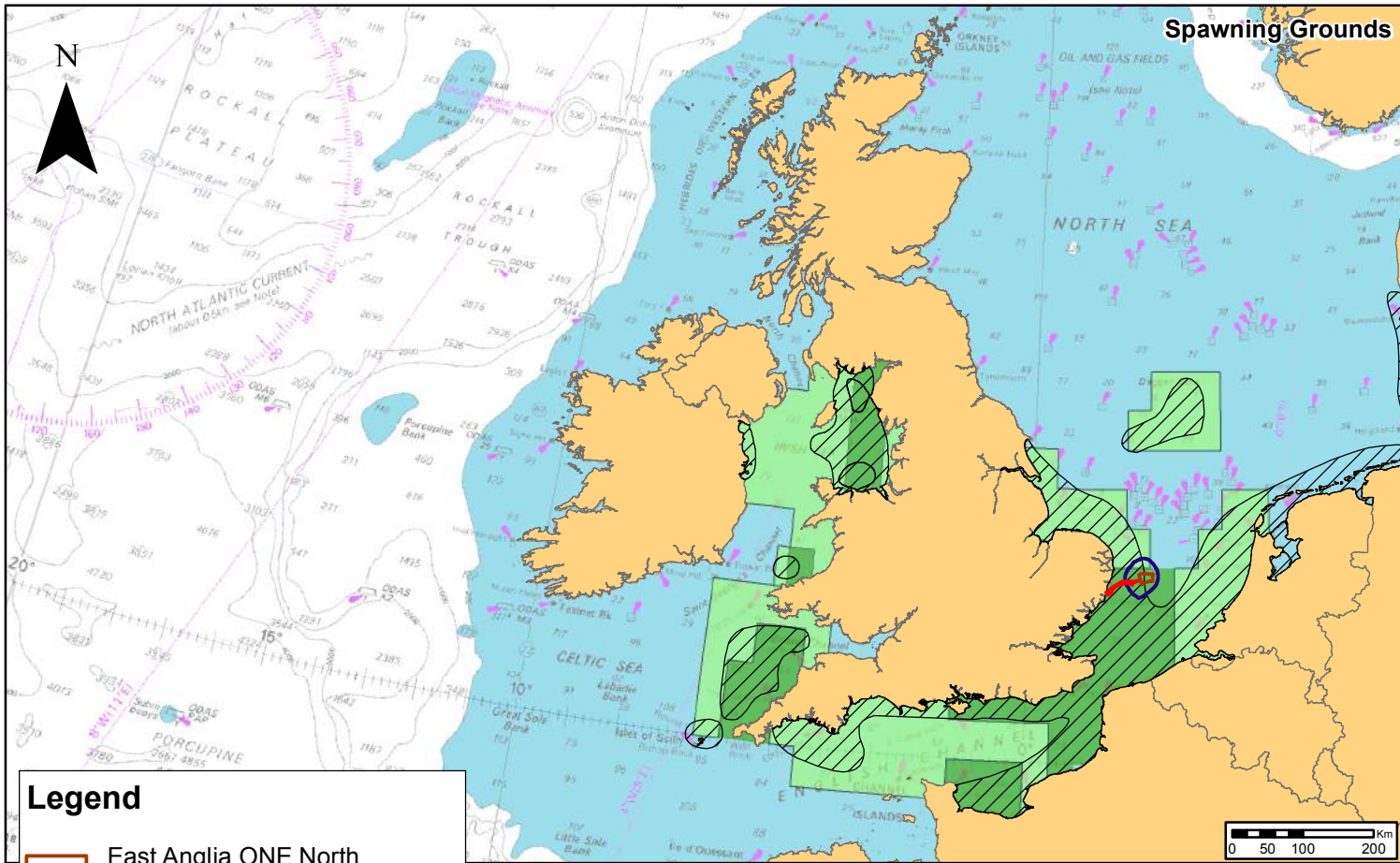
						1:5,000,000		East Anglia ONE North Average Number (Catch per Standardised Haul) of Starry Smoothound from IBTS Survey (2008 - 2018)	Drg No EA1N-DEV-DRG-IBR-000340		
				Prepared:	FC	Scale @ A3			Rev	1	Datum: WGS 1984 Projection: Zone 31N
	1	19/11/2018	FC	First Issue.	Checked:	KC			Date	19/11/18	
	Rev	Date	By	Comment	Approved:	PP			Figure	10.31	



						1:5,000,000		East Anglia ONE North Average Number (Catch per Standardised Haul) of Smoothhound from IBTS Survey (2008 - 2018)	Drg No	EA1N-DEV-DRG-IBR-000341		
					Prepared:	FC			Scale @ A3	Rev	1	Datum: WGS 1984 Projection: Zone 31N
	1	19/11/2018	FC	First Issue.	Checked:	KC			<small>Source: © ICES Database of Trawl Surveys (Dattras), 2018. © The Crown Estate, 2018. Charts from MarineFIND.co.uk Licence No EK001-0645-MF0095. Not to be used for navigation. This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Offshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.</small>	Date	19/11/18	
	Rev	Date	By	Comment	Approved:	PP			Figure	10.32		



						1:5,000,000 Scale @ A3		East Anglia ONE North Average Number (Catch per Standardised Haul) of Spurdog from IBTS Survey (2008 - 2018)	Drg No	EA1N-DEV-DRG-IBR-000342		
					Prepared:	FC			Rev	1	Datum: WGS 1984 Projection: Zone 31N	
	1	19/11/2018	FC	First Issue.	Checked:	KC	<small>Source: © ICES Database of Trawl Surveys (Dattas), 2018. © The Crown Estate, 2018. Charts from MarineFIND.co.uk Licence No EK001-0645-MF0095. Not to be used for navigation.</small> <small>This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Offshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.</small>		Date	19/11/18		
	Rev	Date	By	Comment	Approved:	PP			Figure	10.33		



Legend

East Anglia ONE North Windfarm Site

East Anglia ONE North Offshore Cable Corridor

Dover Sole Spawning Grounds

Coull et al. 1998

Sole

Ellis et al. 2010

High Intensity

Low Intensity

Dover Sole Nursery Grounds

Coull et al. 1998


Sole

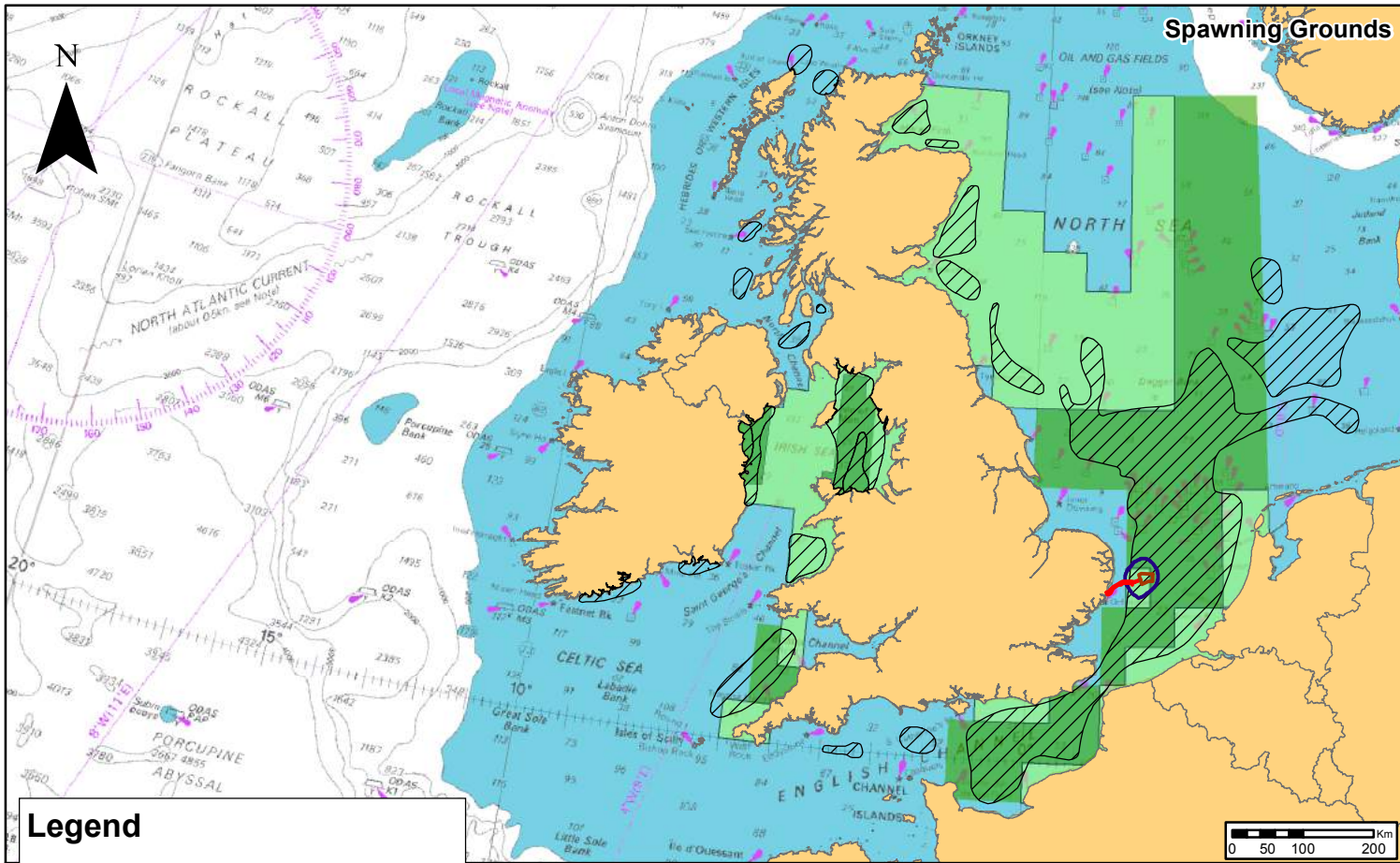
Ellis et al. 2010

High Intensity

Low Intensity

NMFS (2018) Unweighted SELcum of 186 dB re 1 $\mu\text{Pa}^2\text{s}$ for TTS from Pin Pile Installation with Maximum Hammer Energy (2,400kJ)

					Prepared:	FC	Scale @ A3	East Anglia ONE North Dover Sole Spawning and Nursery Grounds in Relation to Pin Pile Noise Impact Contour (2,400kJ)			Drg No	EA1N-DEV-DRG-IBR-000443	
	1	27/11/2018	FC	First Issue.	Checked:	KC					Rev	1	Datum: WGS 1984 Projection: Zone 31N
	Rev	Date	By	Comment	Approved:	PP					Date	27/11/18	
											Figure	10.34	



Legend

- East Anglia ONE North Windfarm Site
- East Anglia ONE North Offshore Cable Corridor

Plaice Spawning Grounds

Coull et al. 1998

- Plaice

Ellis et al. 2010

- High Intensity
- Low Intensity

Plaice Nursery Grounds

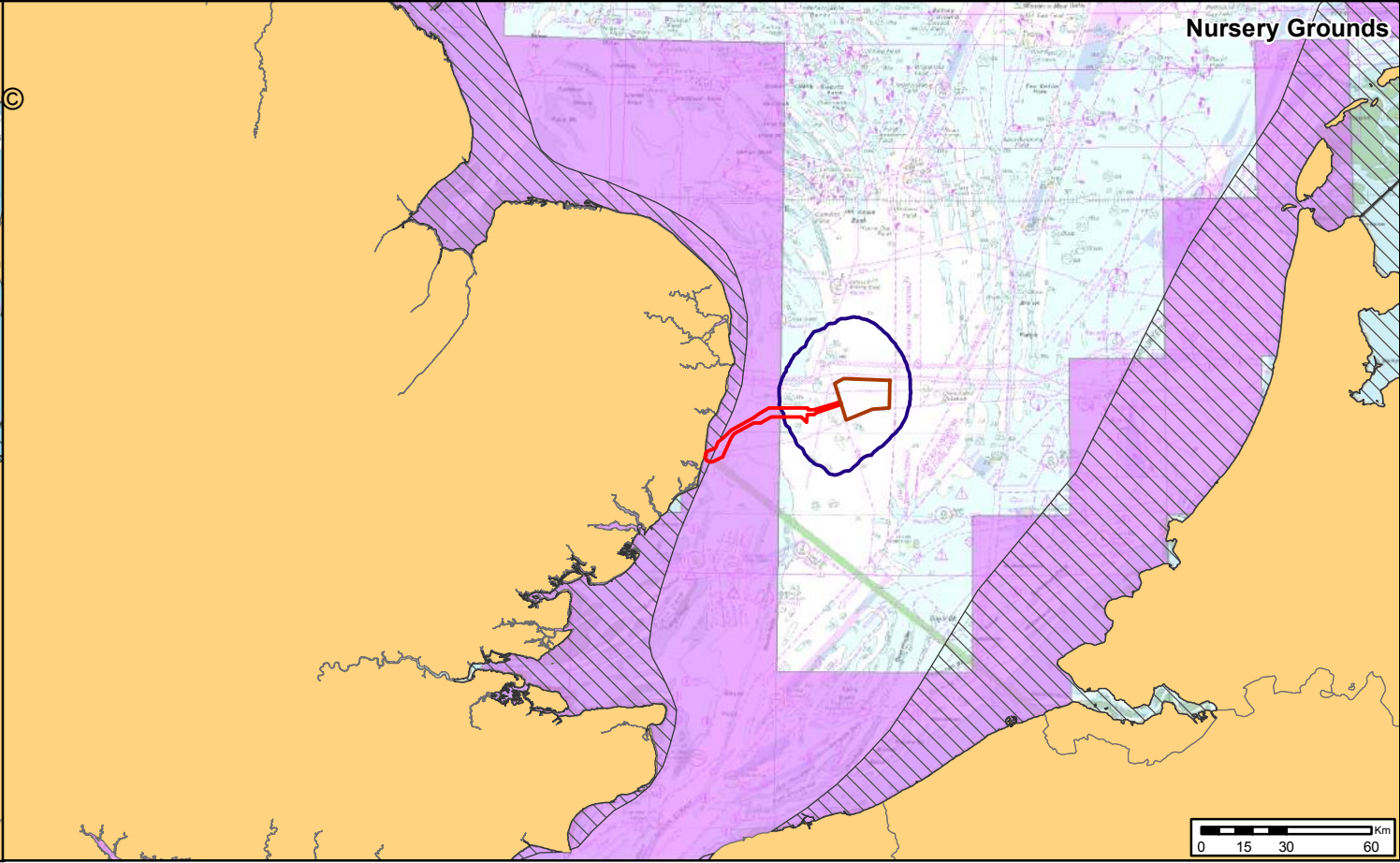
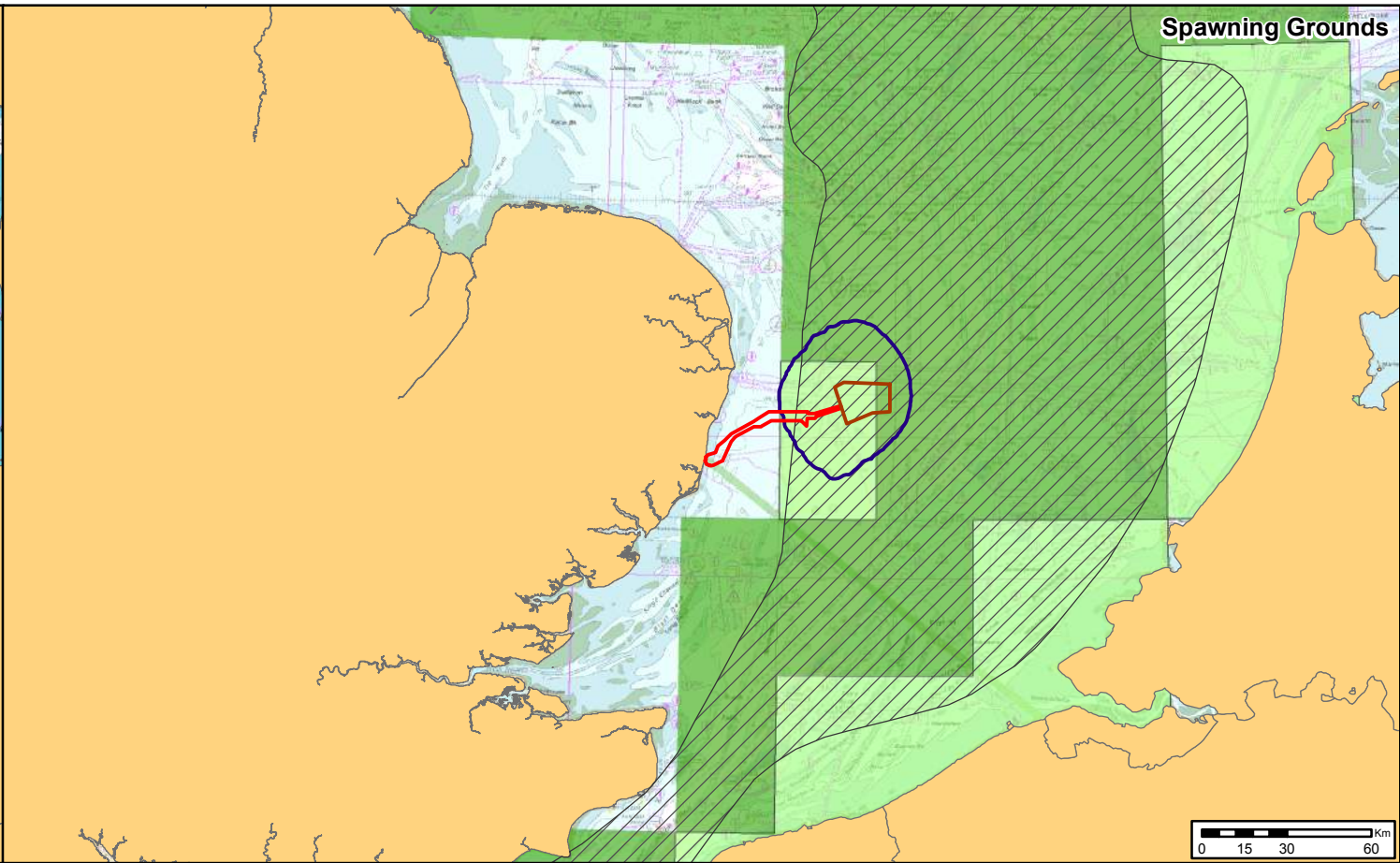
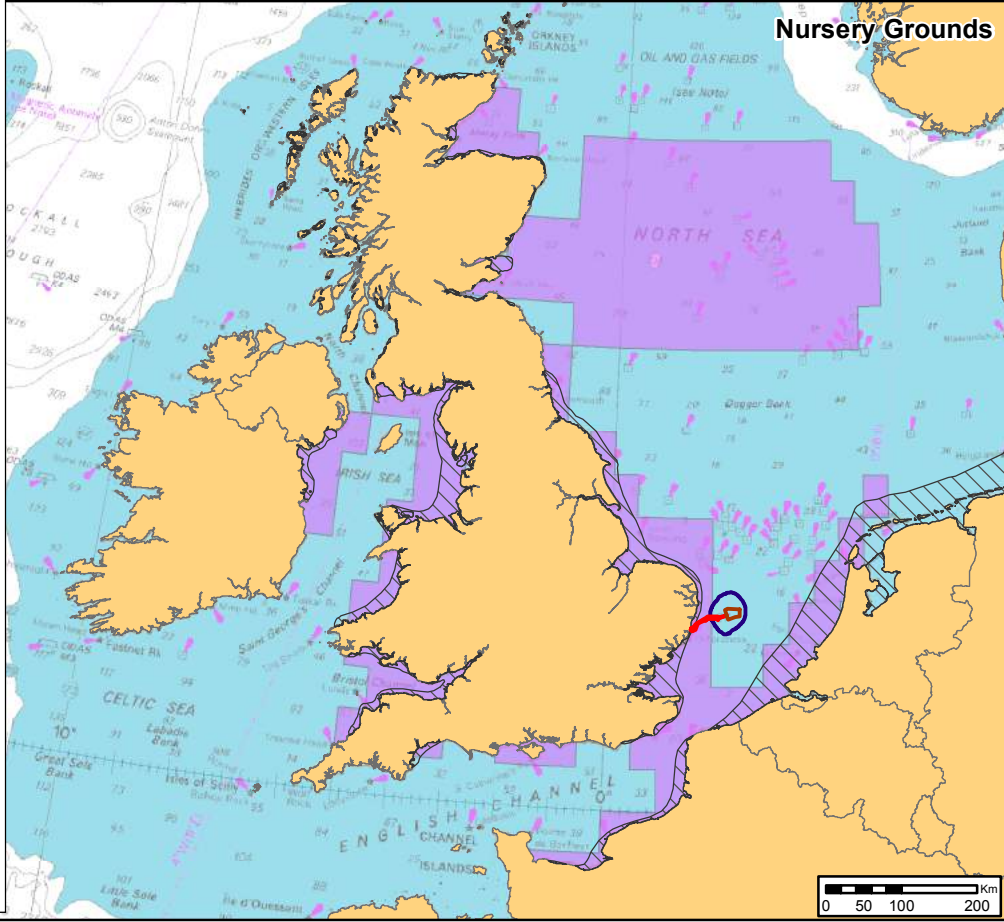
Coull et al. 1998

- Plaice

Ellis et al. 2010

- High Intensity
- Low Intensity

NMFS (2018) Unweighted SELcum of 186 dB re 1 $\mu\text{Pa}^2\text{s}$ for TTS from Pin Pile Installation with Maximum Hammer Energy (2,400kJ)



Rev	Date	By	Comment
1	27/11/2018	FC	First Issue.

Prepared:

FC

Scale @ A3

Checked:

KC

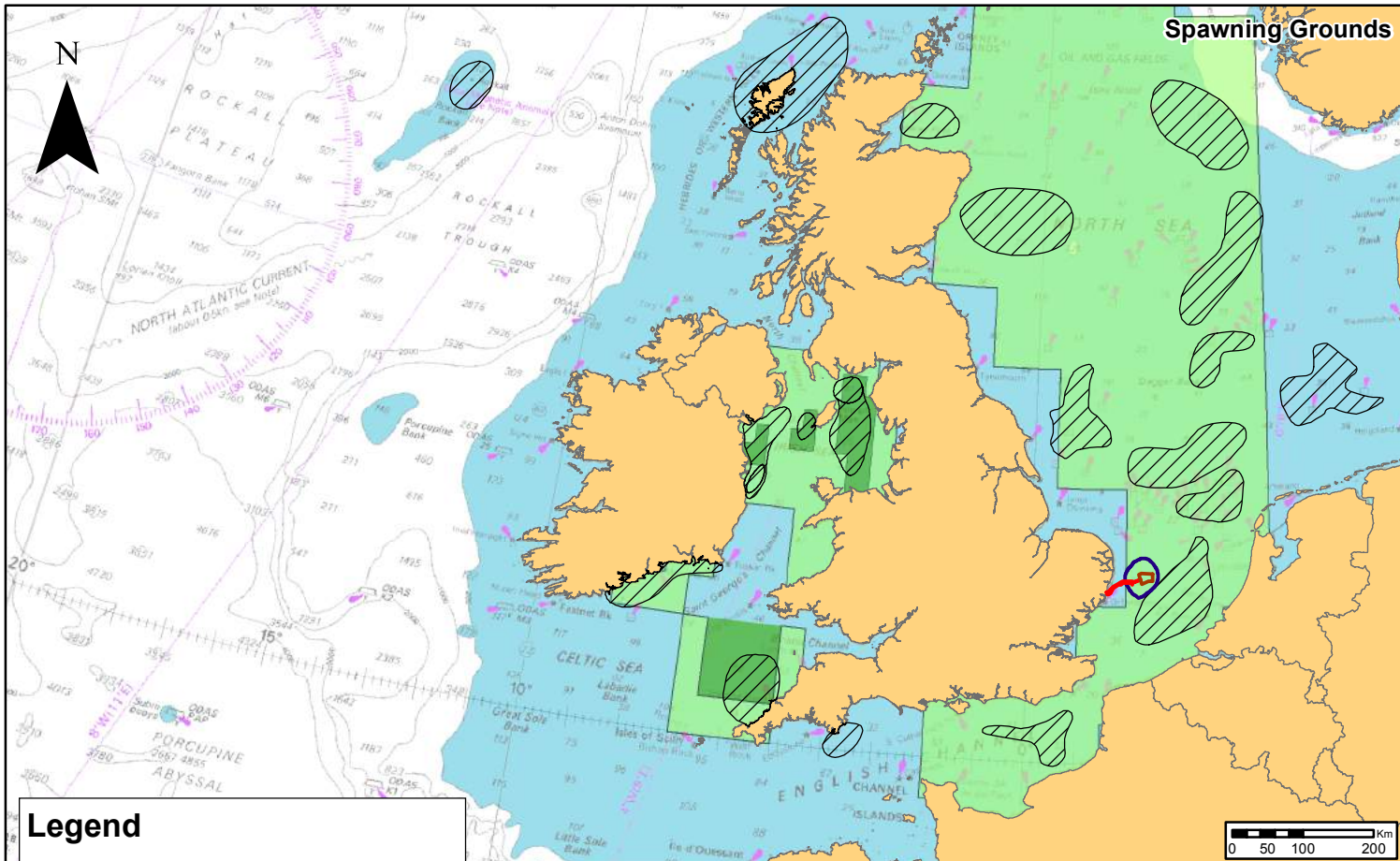
Approved:

PP

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East Anglia ONE North
Plaice Spawning and Nursery Grounds in
Relation to Pin Pile Noise Impact Contour
(2,400kJ)

Drg No	EA1N-DEV-DRG-IBR-000444	
Rev	1	Datum: WGS 1984 Projection: Zone 31N
Date	27/11/18	
Figure	10.35	



Legend

- East Anglia ONE North Windfarm Site
- East Anglia ONE North Offshore Cable Corridor

Cod Spawning Grounds

Coull et al. 1998

- Cod

Ellis et al. 2010

- High Intensity
- Low Intensity

Cod Nursery Grounds

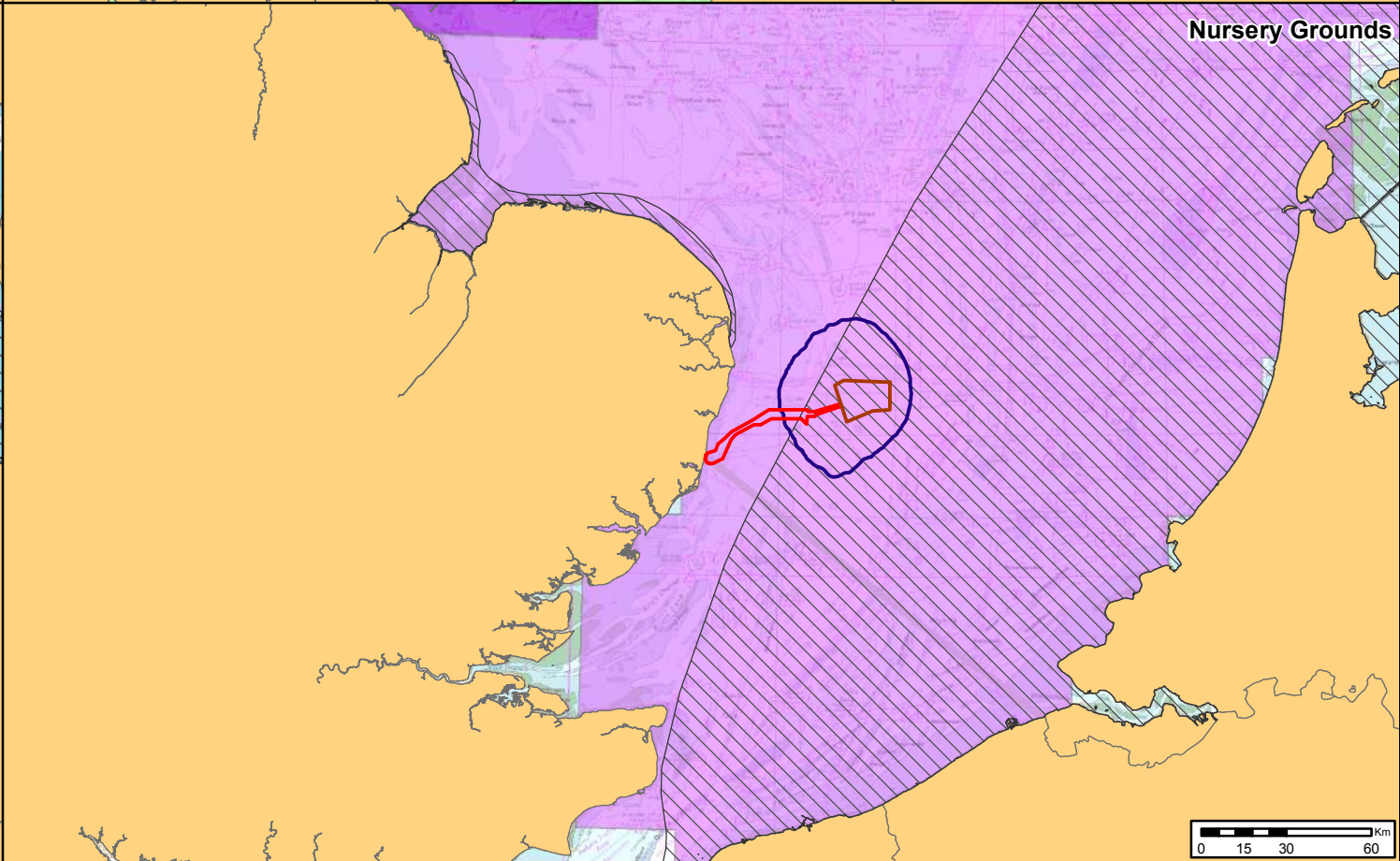
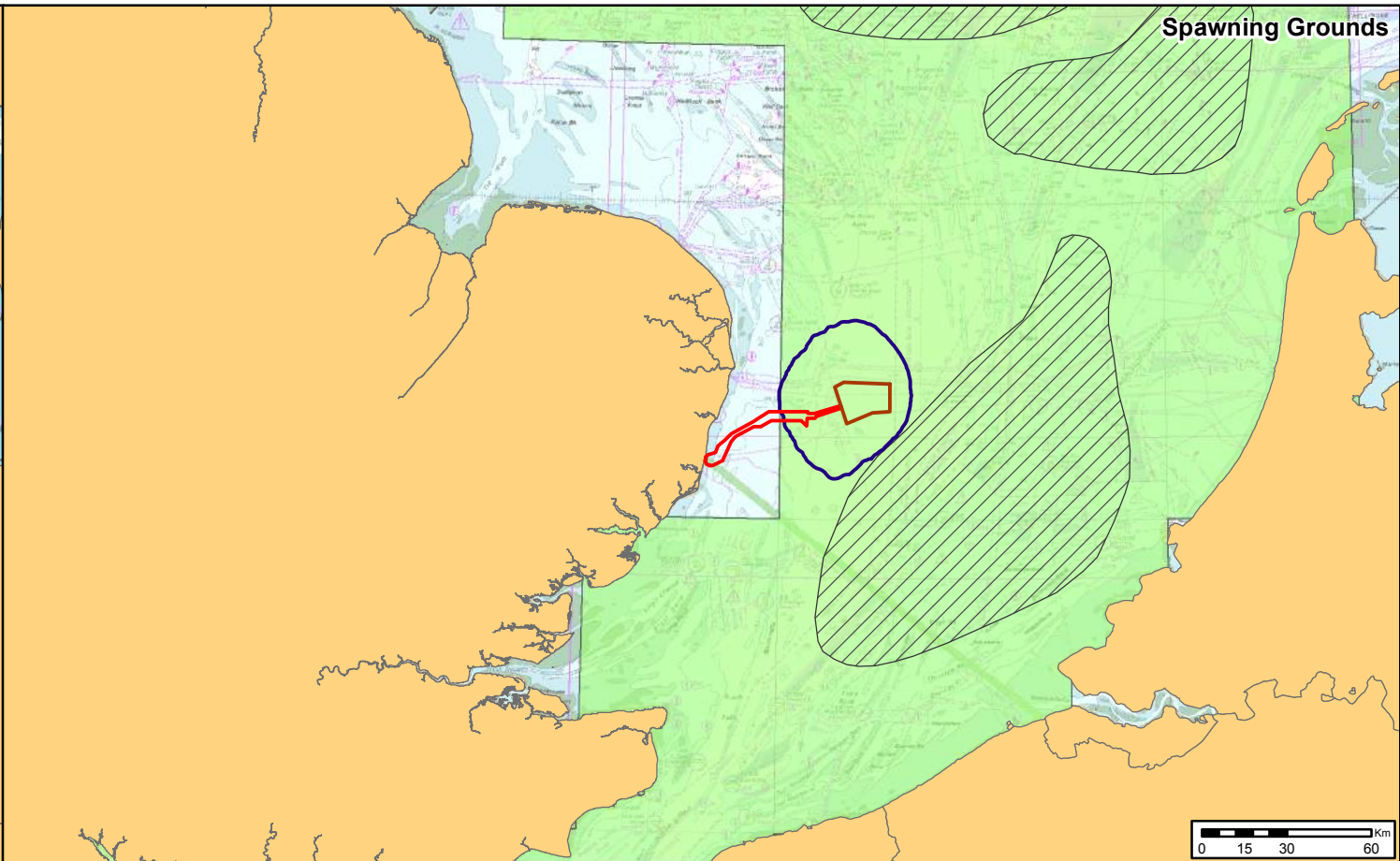
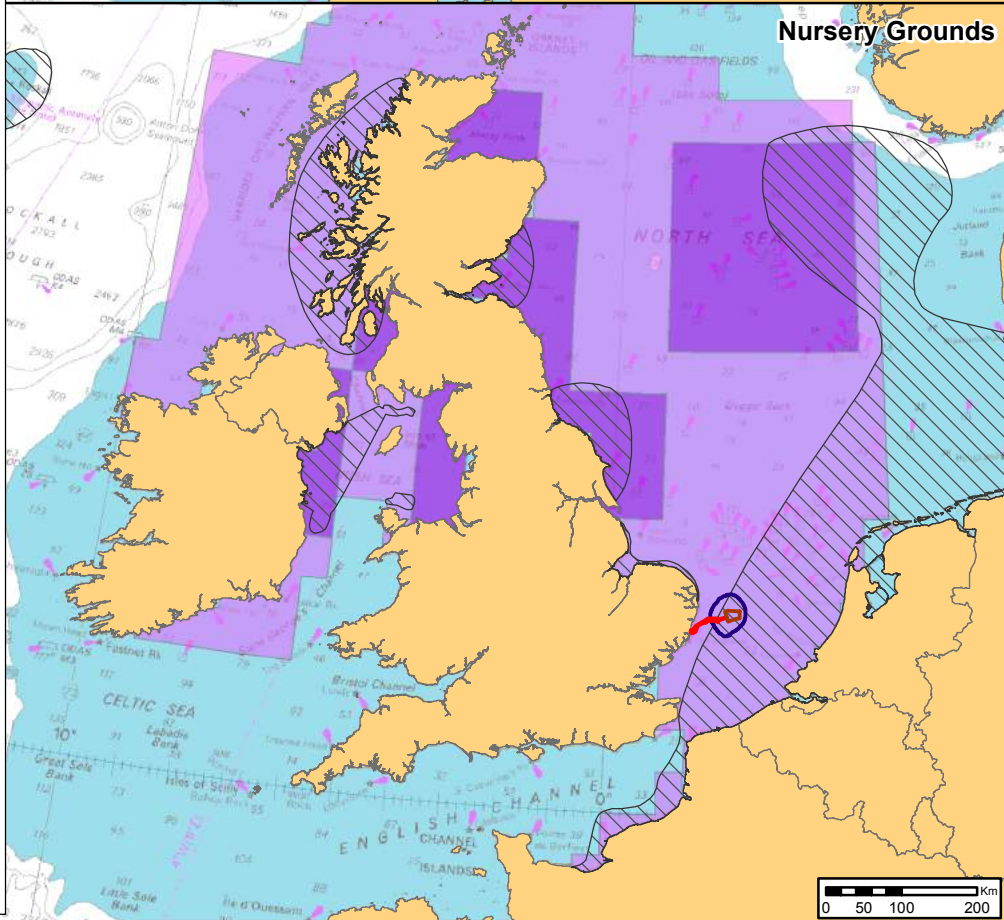
Coull et al. 1998

- Cod

Ellis et al. 2010

- High Intensity
- Low Intensity

NMFS (2018) Unweighted SELcum of 186 dB re 1 $\mu\text{Pa}^2\text{s}$ for TTS from Pin Pile Installation with Maximum Hammer Energy (2,400kJ)



Rev	Date	By	Comment
1	27/11/2018	FC	First Issue.

Prepared: FC

Checked: KC

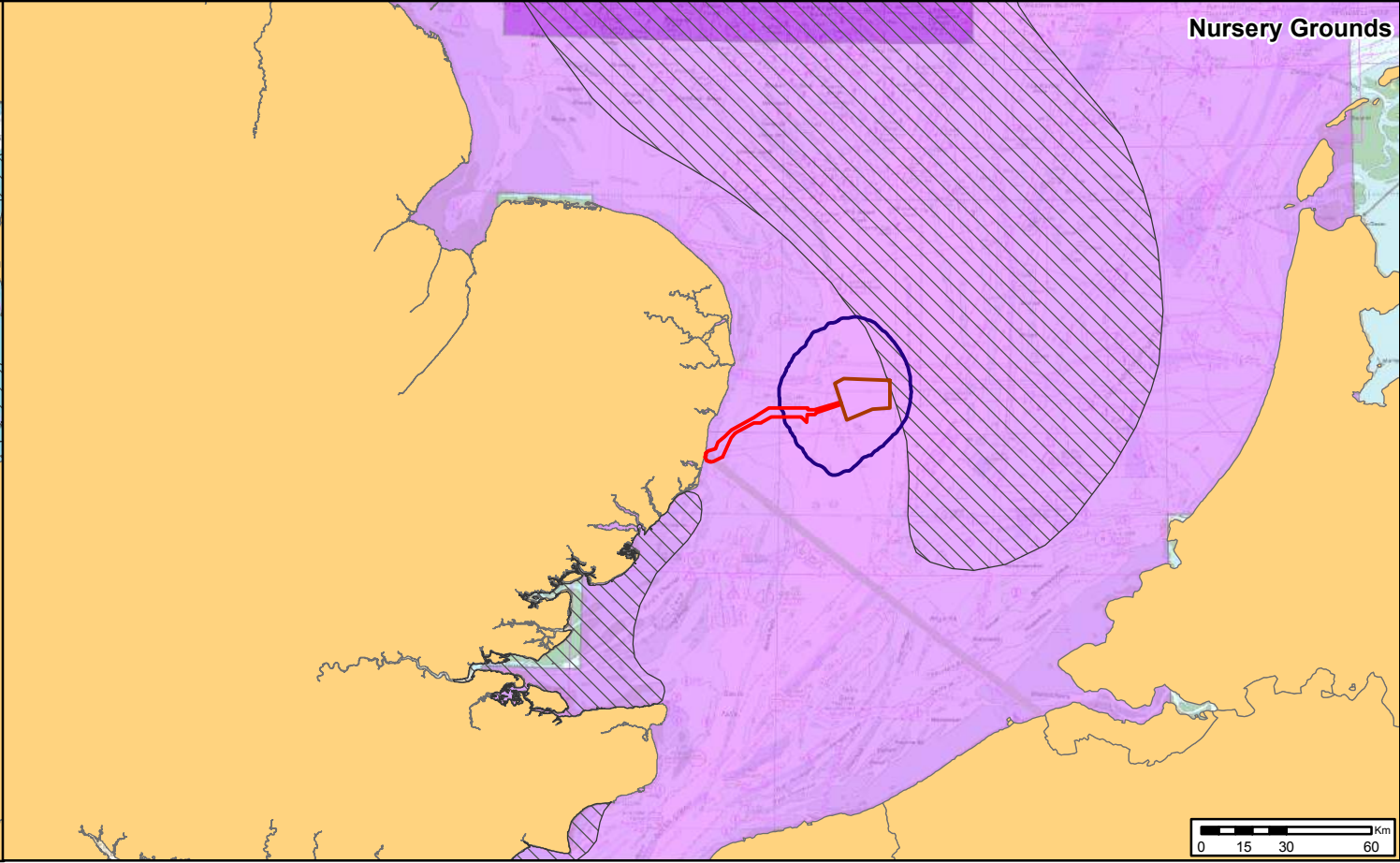
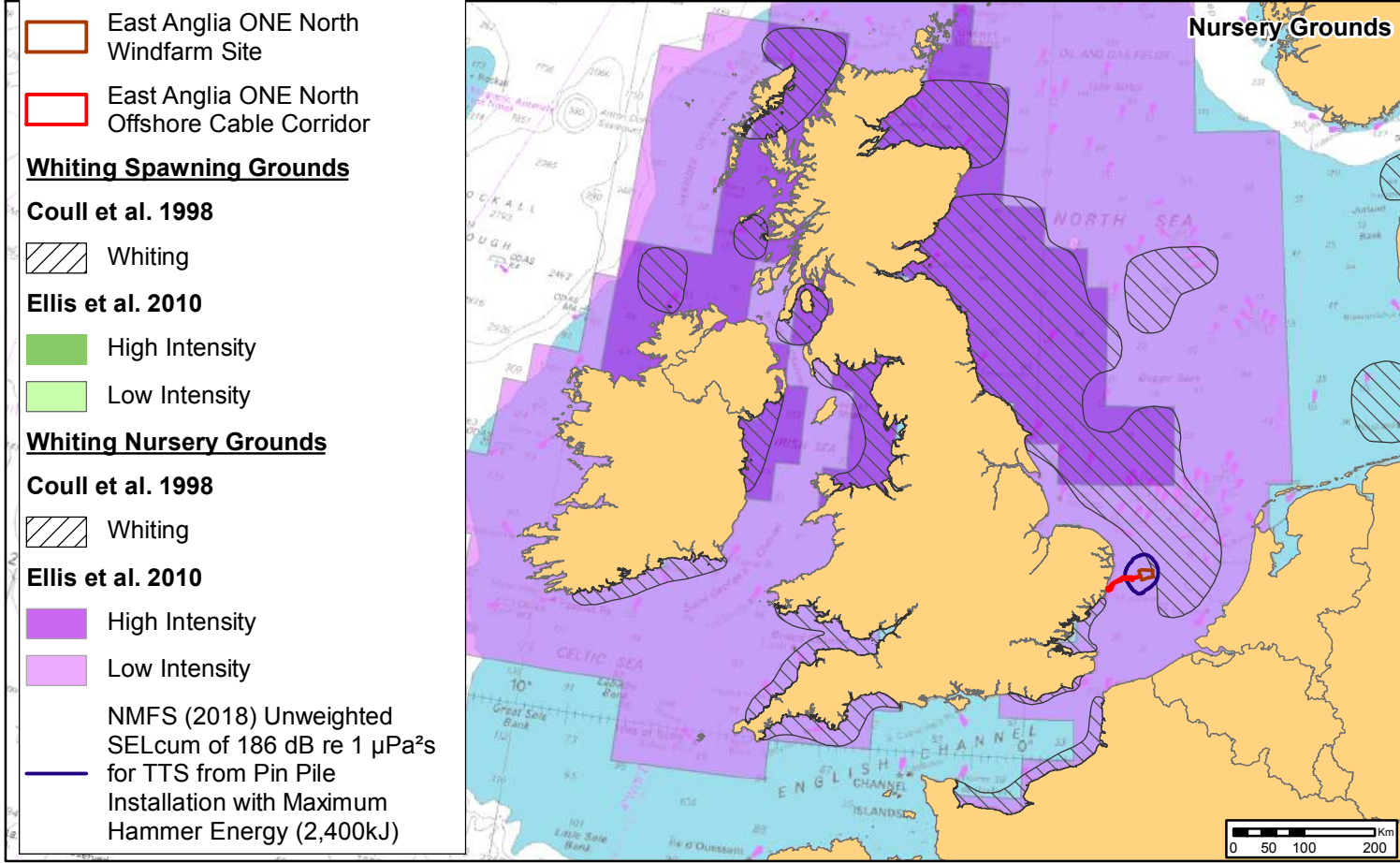
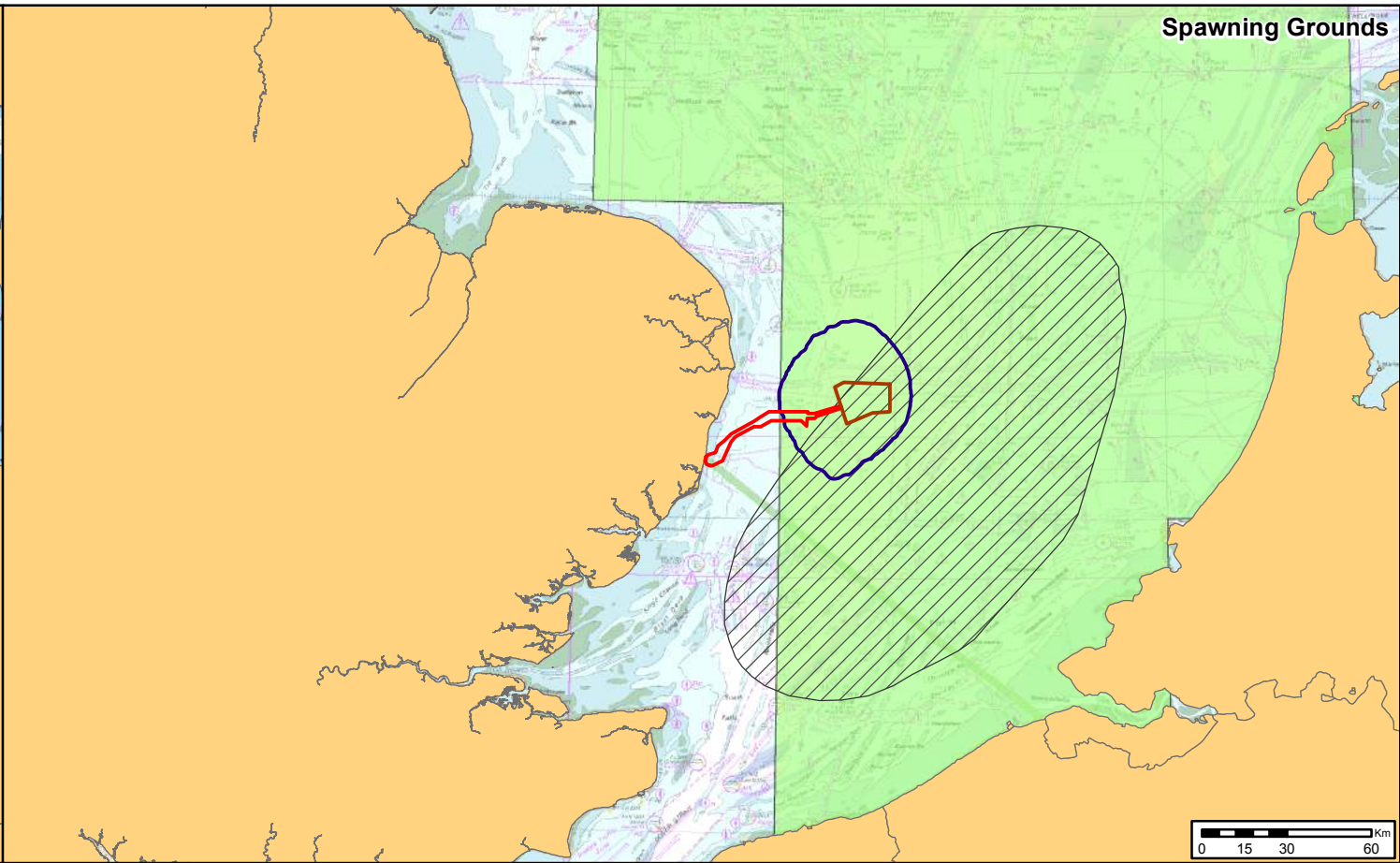
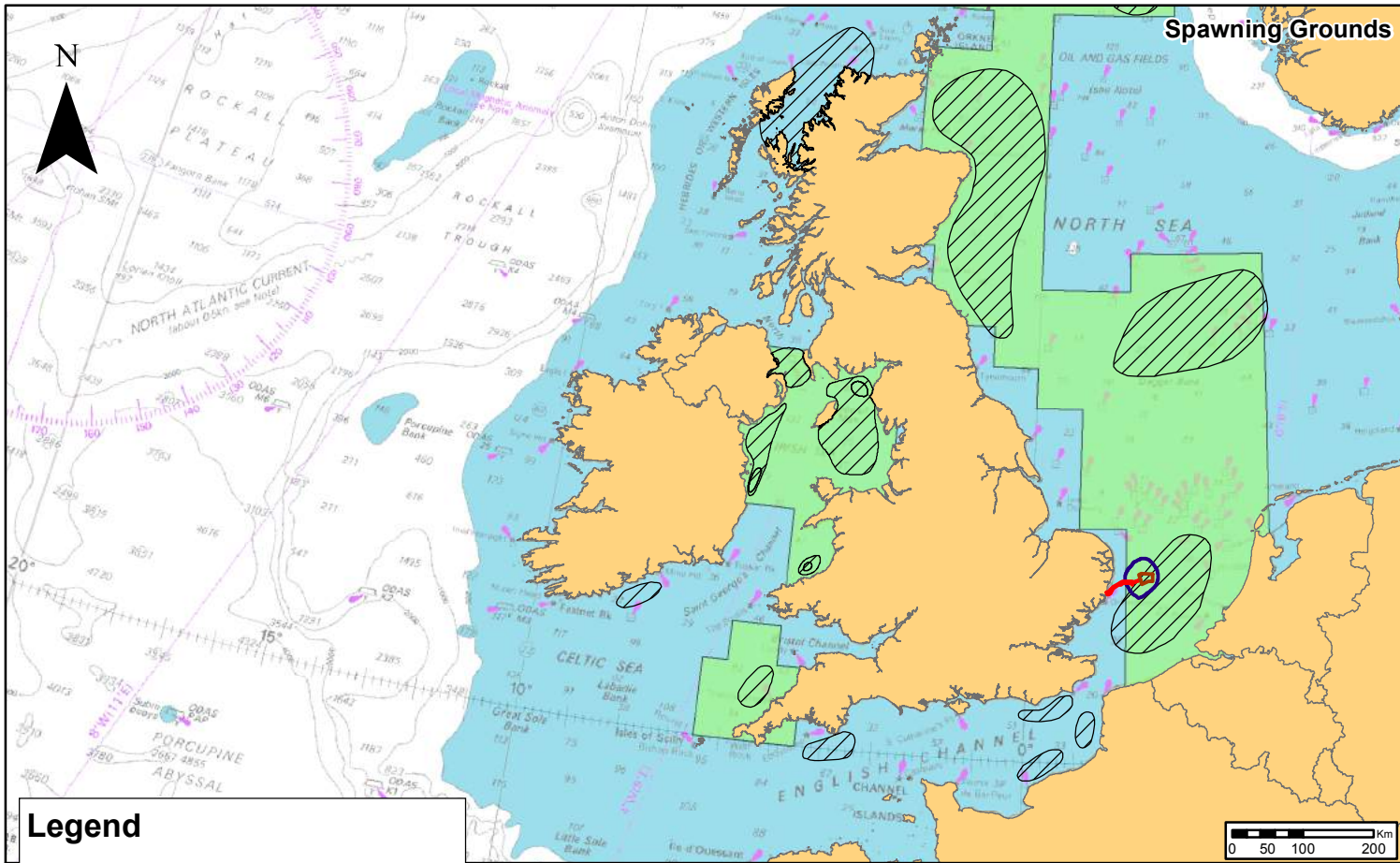
Approved: PP

Scale @ A3

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East Anglia ONE North Cod Spawning and Nursery Grounds in Relation to Pin Pile Noise Impact Contour (2,400kJ)

Drg No	EA1N-DEV-DRG-IBR-000448
Rev	1
Date	27/11/18
Figure	10.36
Datum: WGS 1984 Projection: Zone 31N	



Legend

- East Anglia ONE North Windfarm Site
- East Anglia ONE North Offshore Cable Corridor

Whiting Spawning Grounds

Coull et al. 1998

- Whiting

Ellis et al. 2010

- High Intensity
- Low Intensity

Whiting Nursery Grounds

Coull et al. 1998

- Whiting

Ellis et al. 2010

- High Intensity
- Low Intensity

NMFS (2018) Unweighted SELcum of 186 dB re 1 $\mu\text{Pa}^2\text{s}$ for TTS from Pin Pile Installation with Maximum Hammer Energy (2,400kJ)



Rev	Date	By	Comment
1	27/11/2018	FC	First Issue.

Prepared: FC

Checked: KC

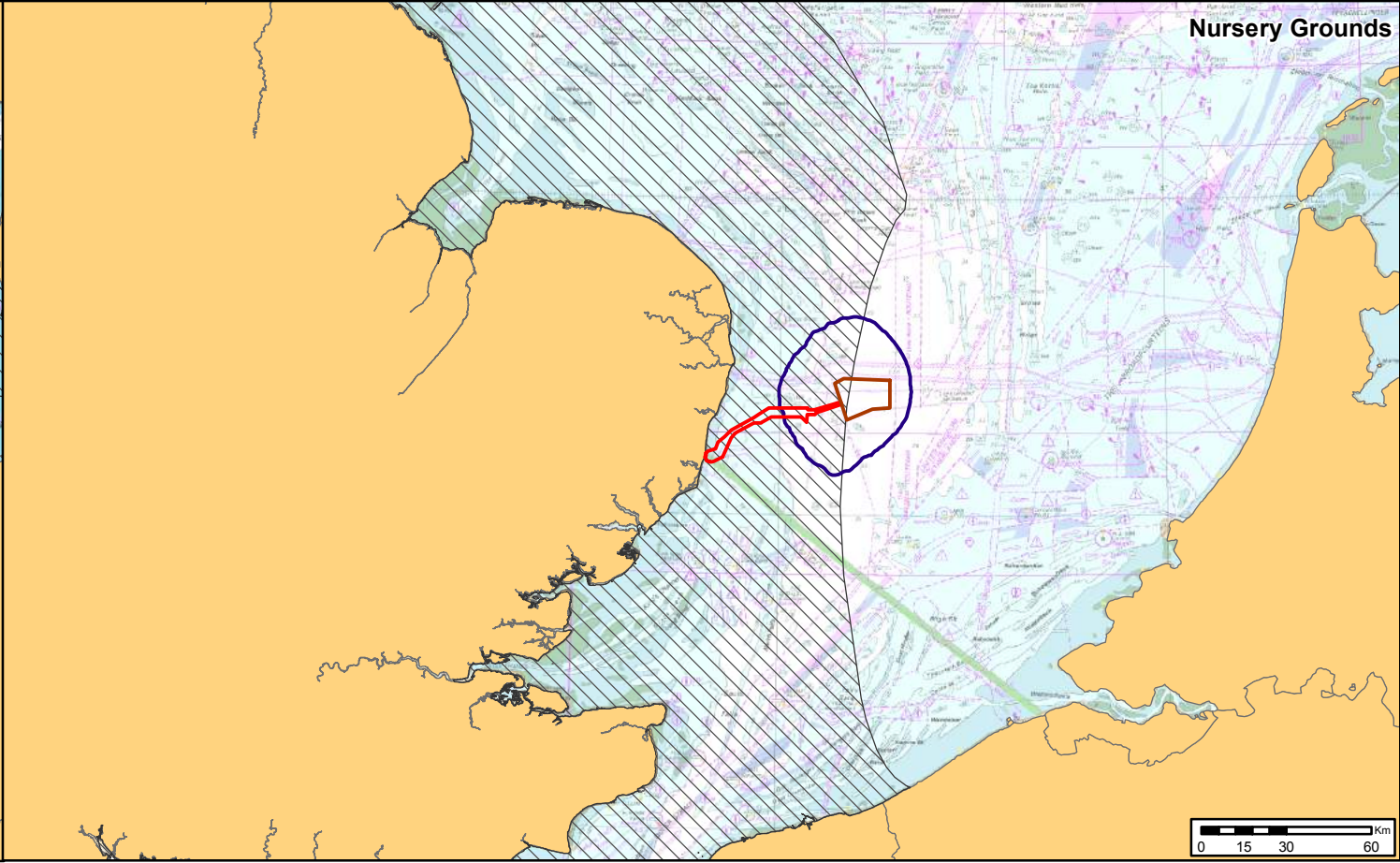
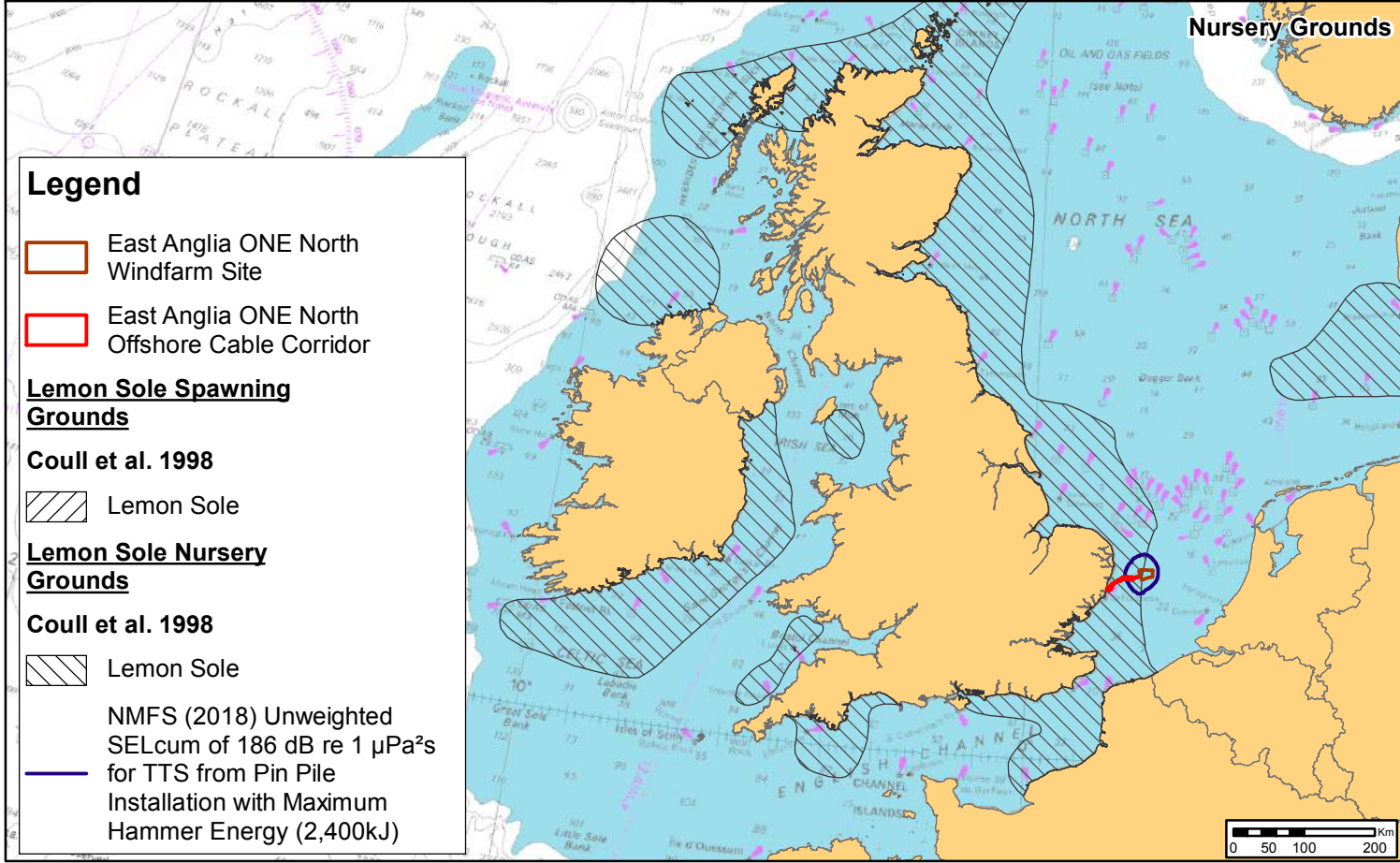
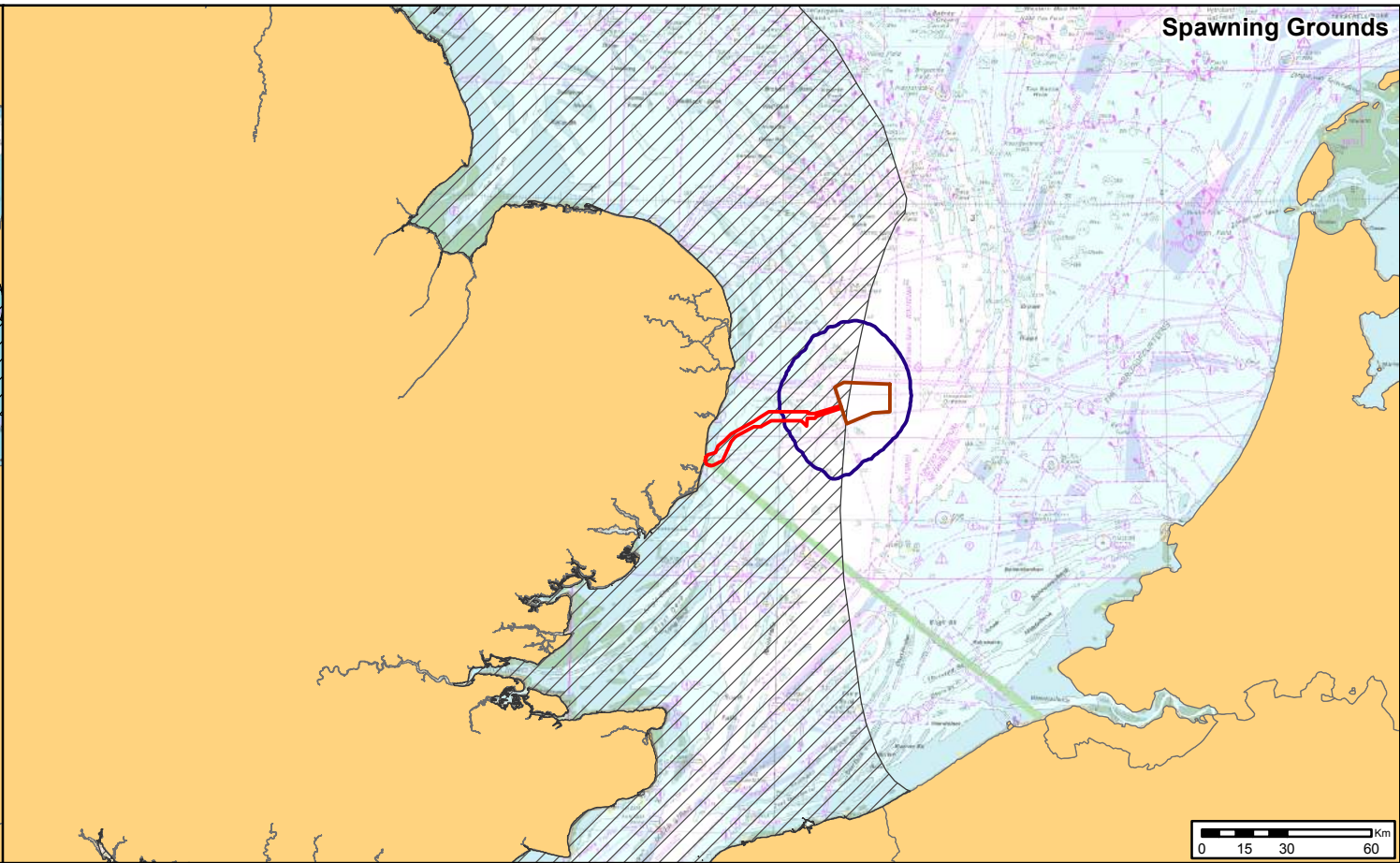
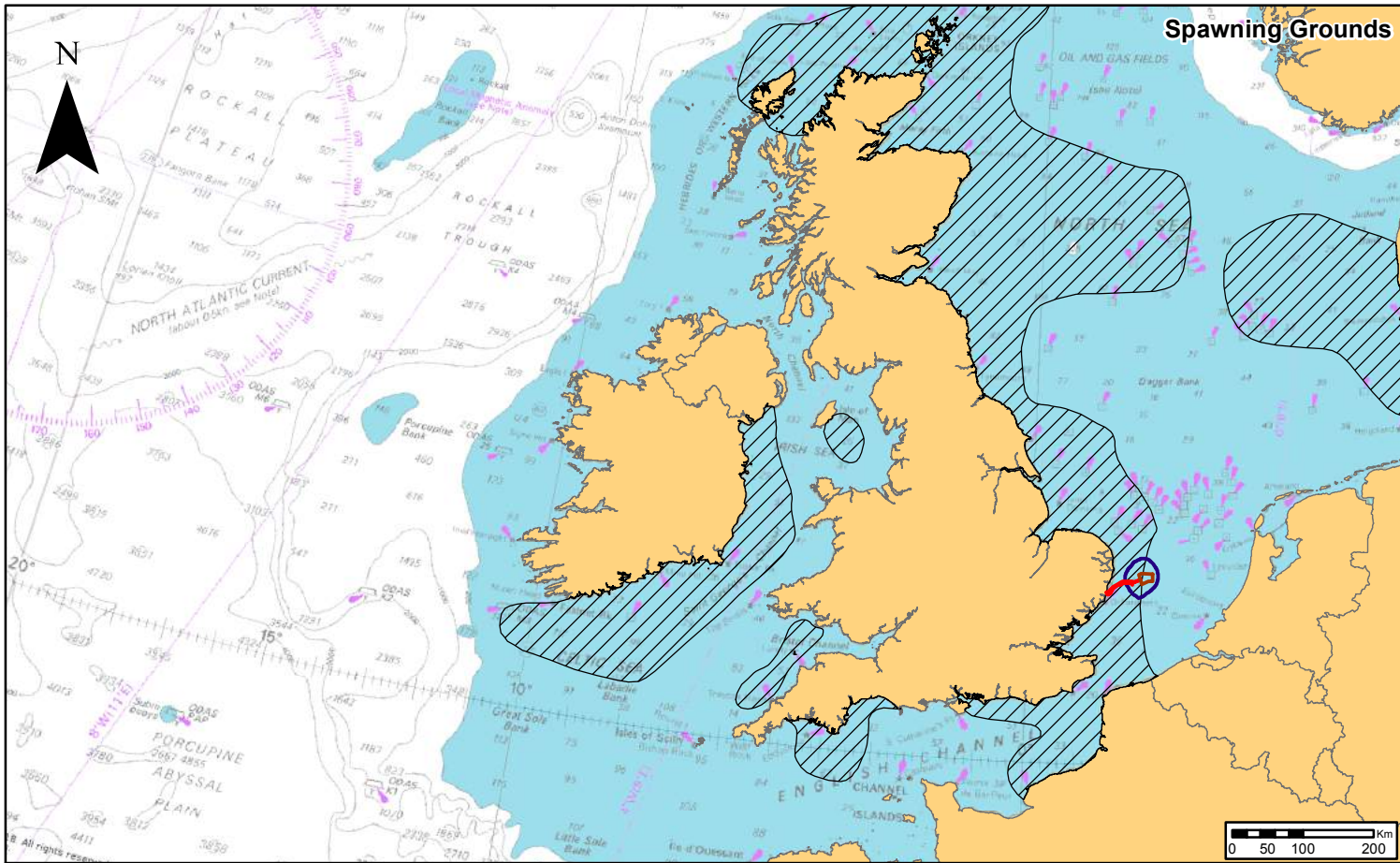
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Scale @ A3

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East Anglia ONE North Whiting Spawning and Nursery Grounds in Relation to Pin Pile Noise Impact Contour (2,400kJ)

Drg No	EA1N-DEV-DRG-IBR-000449	
Rev	1	Datum: WGS 1984 Projection: Zone 31N
Date	27/11/18	
Figure	10.37	



Legend

- East Anglia ONE North Windfarm Site
- East Anglia ONE North Offshore Cable Corridor

Lemon Sole Spawning Grounds

Coull et al. 1998

- Lemon Sole

Lemon Sole Nursery Grounds

Coull et al. 1998

- Lemon Sole

NMFS (2018) Unweighted SELcum of 186 dB re 1 $\mu\text{Pa}^2\text{s}$ for TTS from Pin Pile Installation with Maximum Hammer Energy (2,400kJ)



Rev	Date	By	Comment
1	27/11/2018	FC	First Issue.

Prepared: FC

Checked: KC

Approved: PP

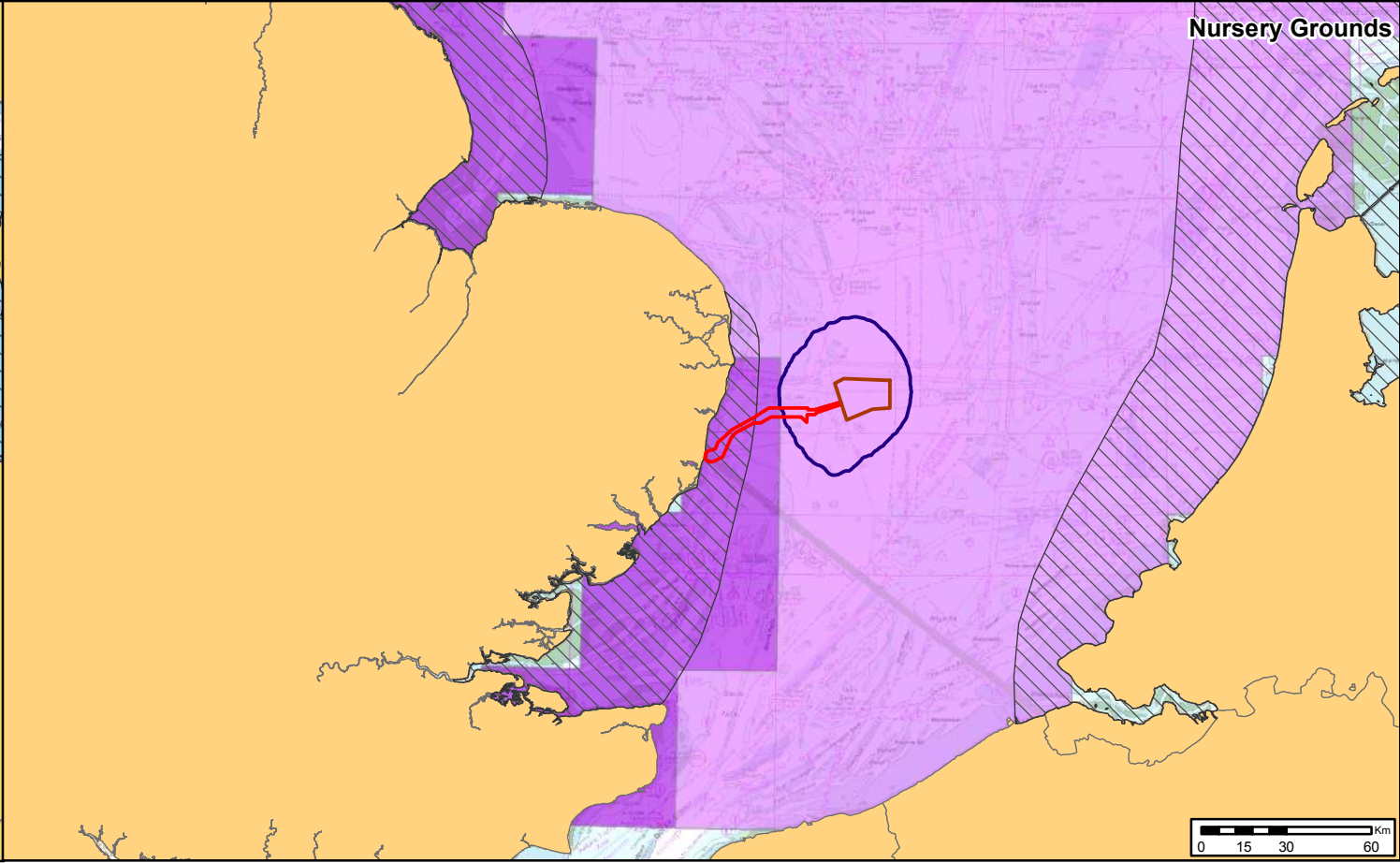
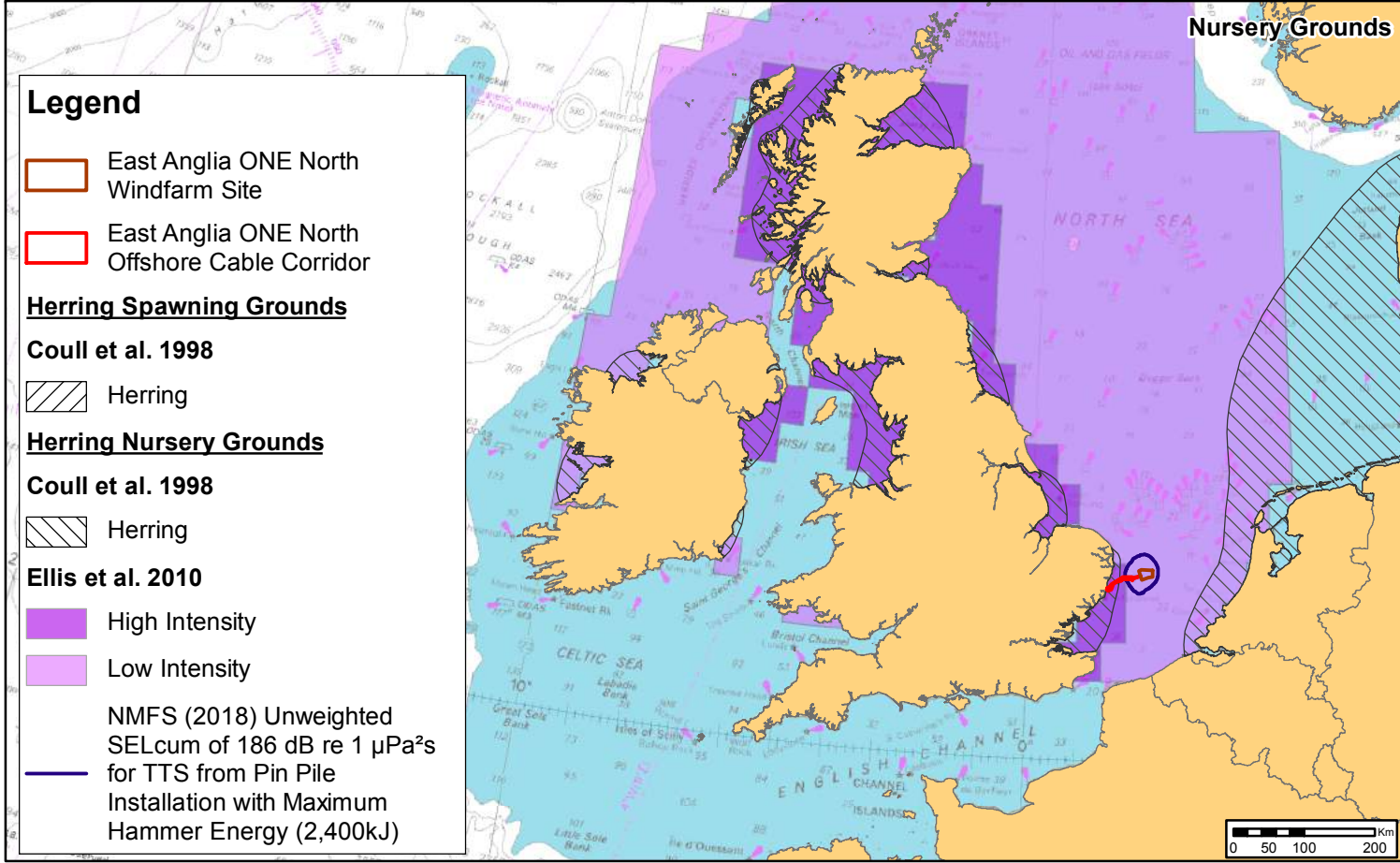
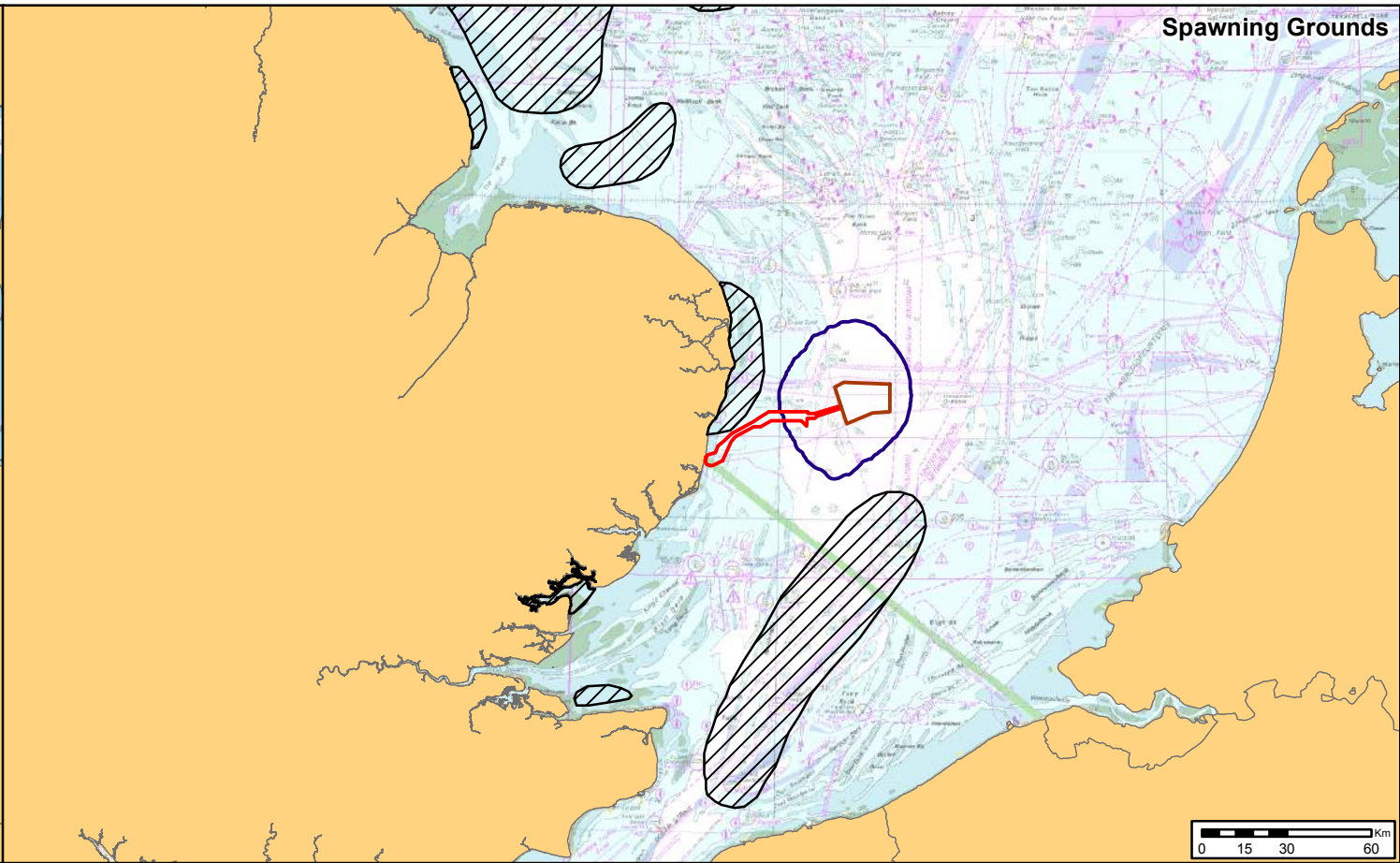
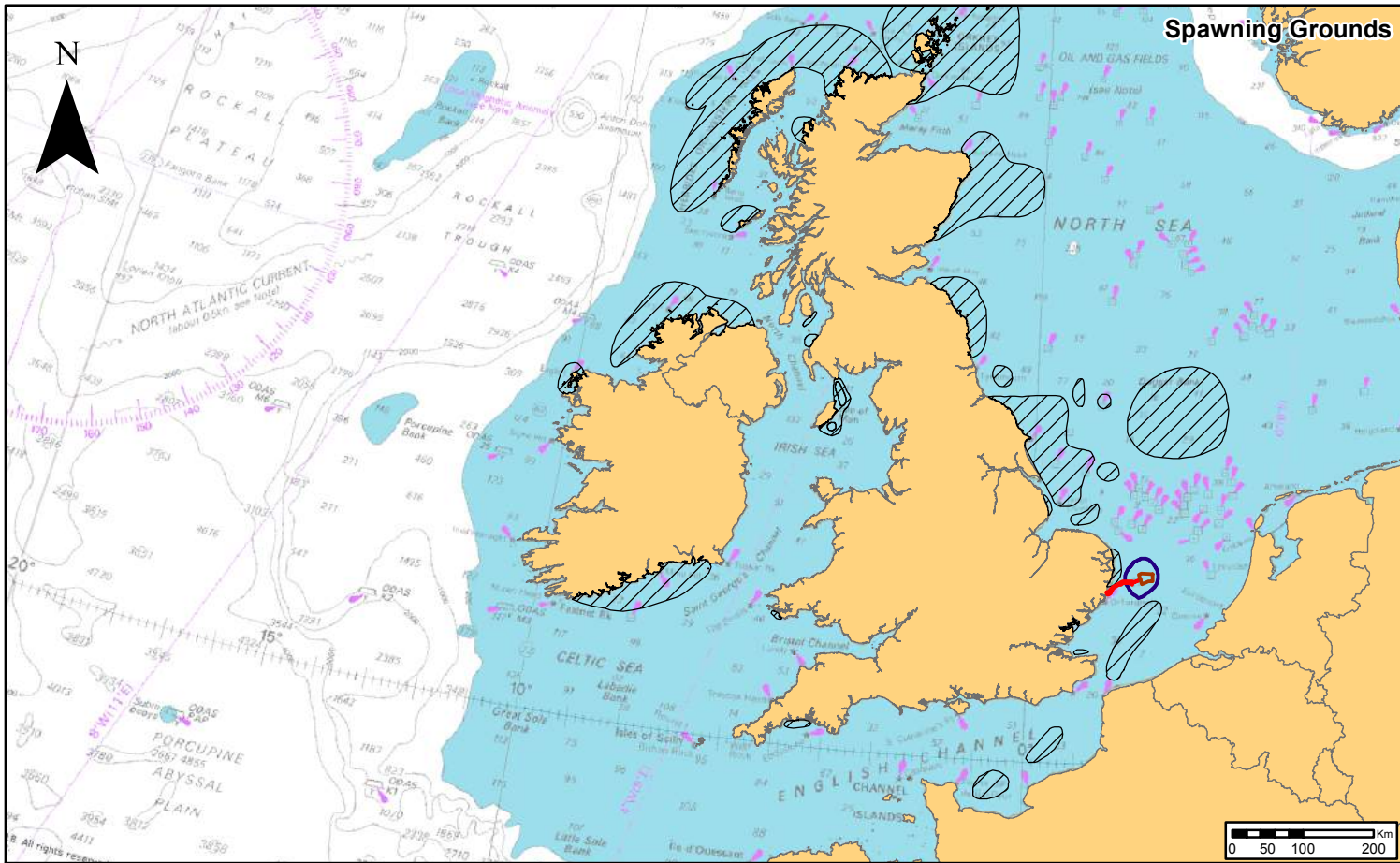
Scale @ A3

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East Anglia ONE North

Lemon Sole Spawning and Nursery Grounds in Relation to Pin Pile Noise Impact Contour (2,400kJ)

Drg No	EA1N-DEV-DRG-IBR-000445		
Rev	1	Datum: WGS 1984 Projection: Zone 31N	
Date	27/11/18		
Figure	10.38		



Legend

- East Anglia ONE North Windfarm Site
- East Anglia ONE North Offshore Cable Corridor

Herring Spawning Grounds

Coull et al. 1998

- Herring

Herring Nursery Grounds

Coull et al. 1998

- Herring

Ellis et al. 2010

- High Intensity
- Low Intensity

NMFS (2018) Unweighted SELcum of 186 dB re 1 $\mu\text{Pa}^2\text{s}$ for TTS from Pin Pile Installation with Maximum Hammer Energy (2,400kJ)



Rev	Date	By	Comment
1	27/11/2018	FC	First Issue.

Prepared: FC Scale @ A3

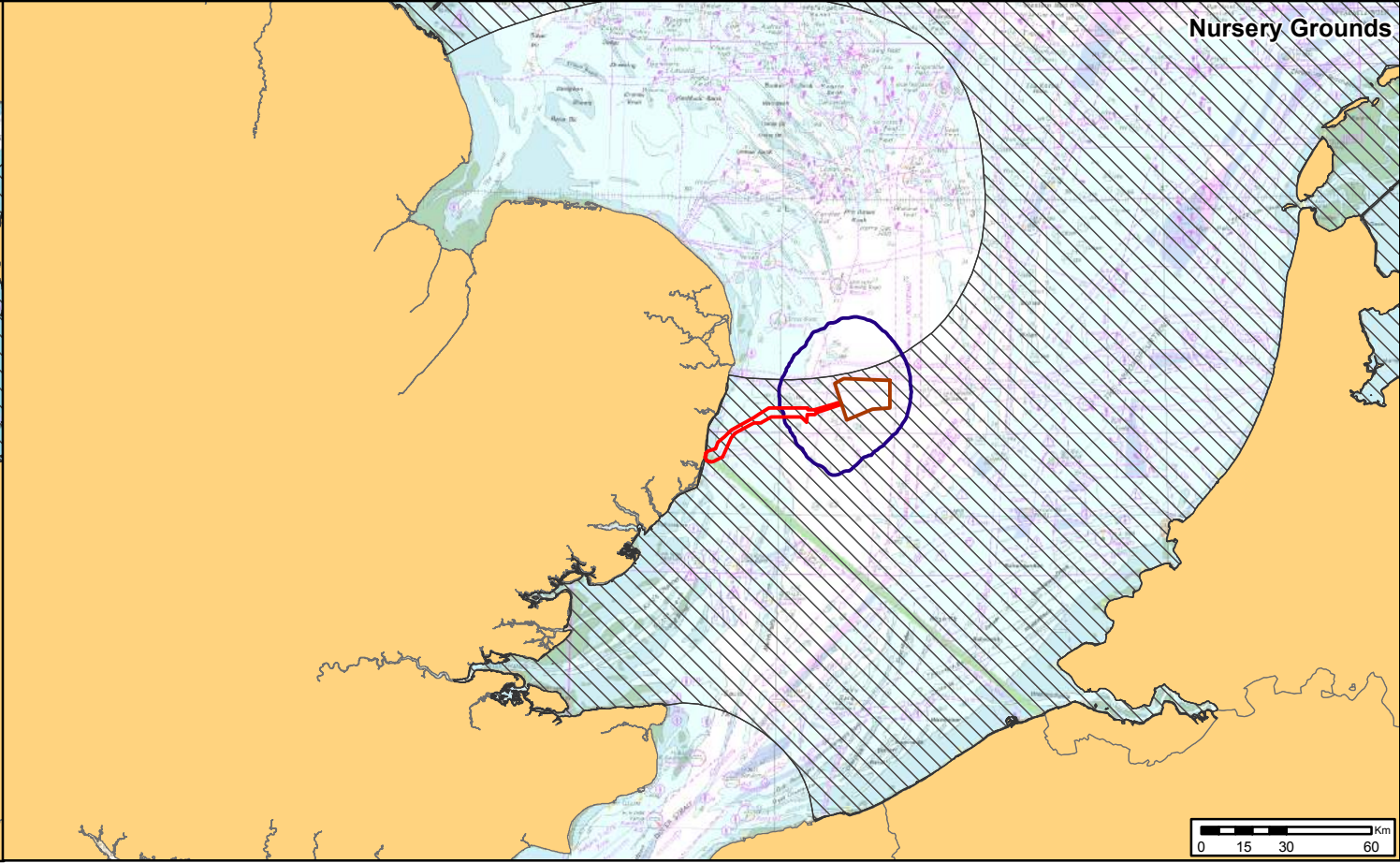
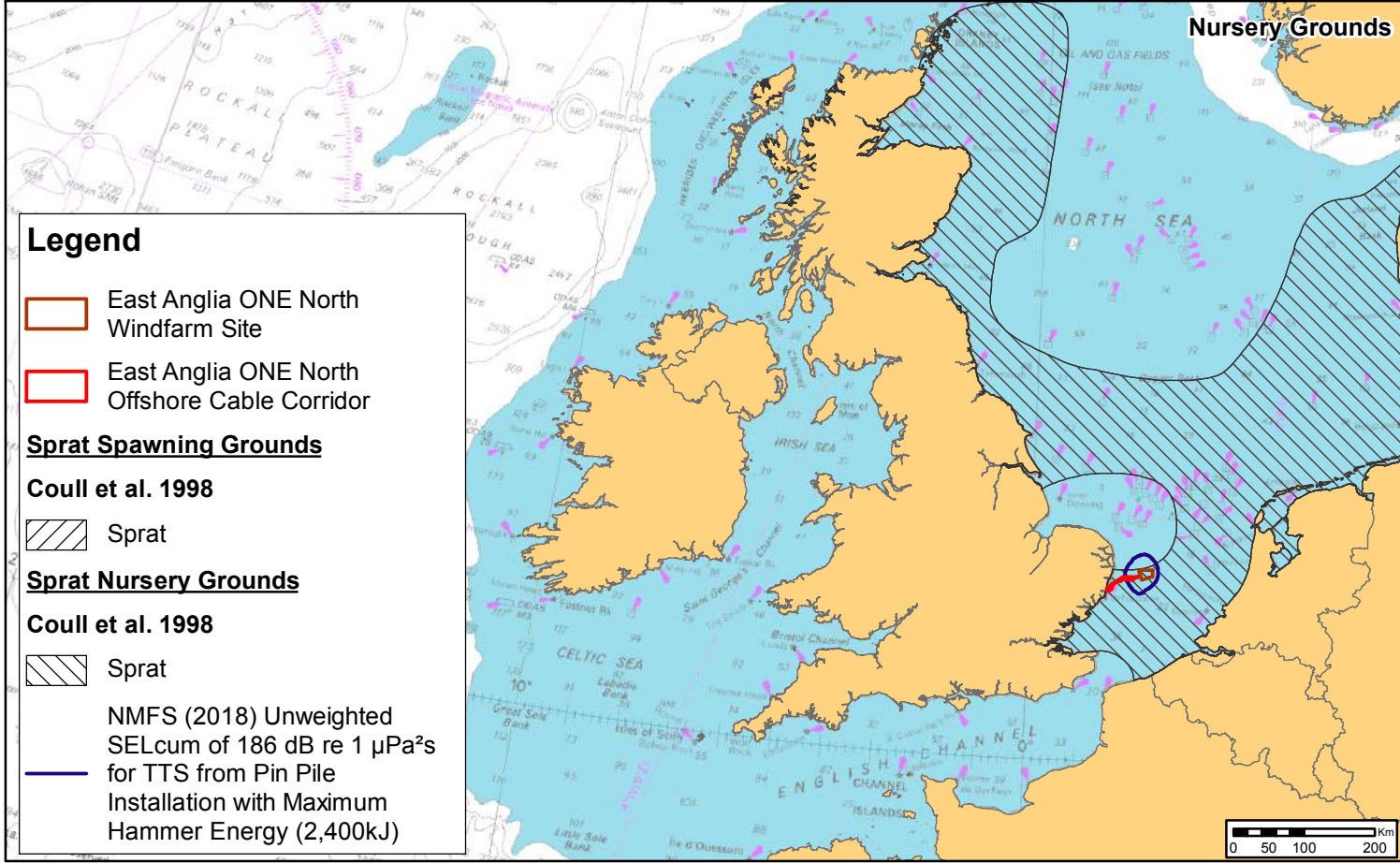
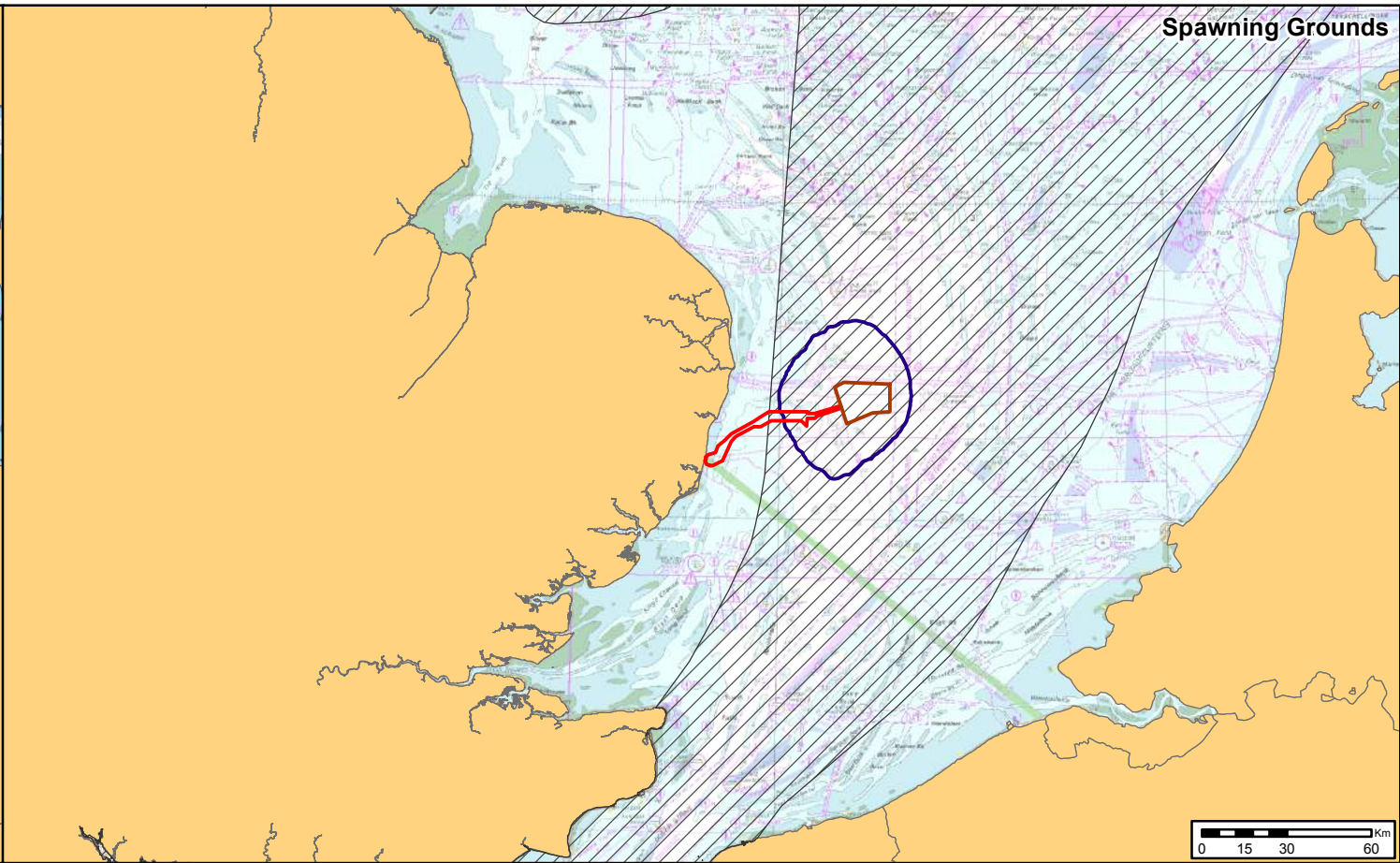
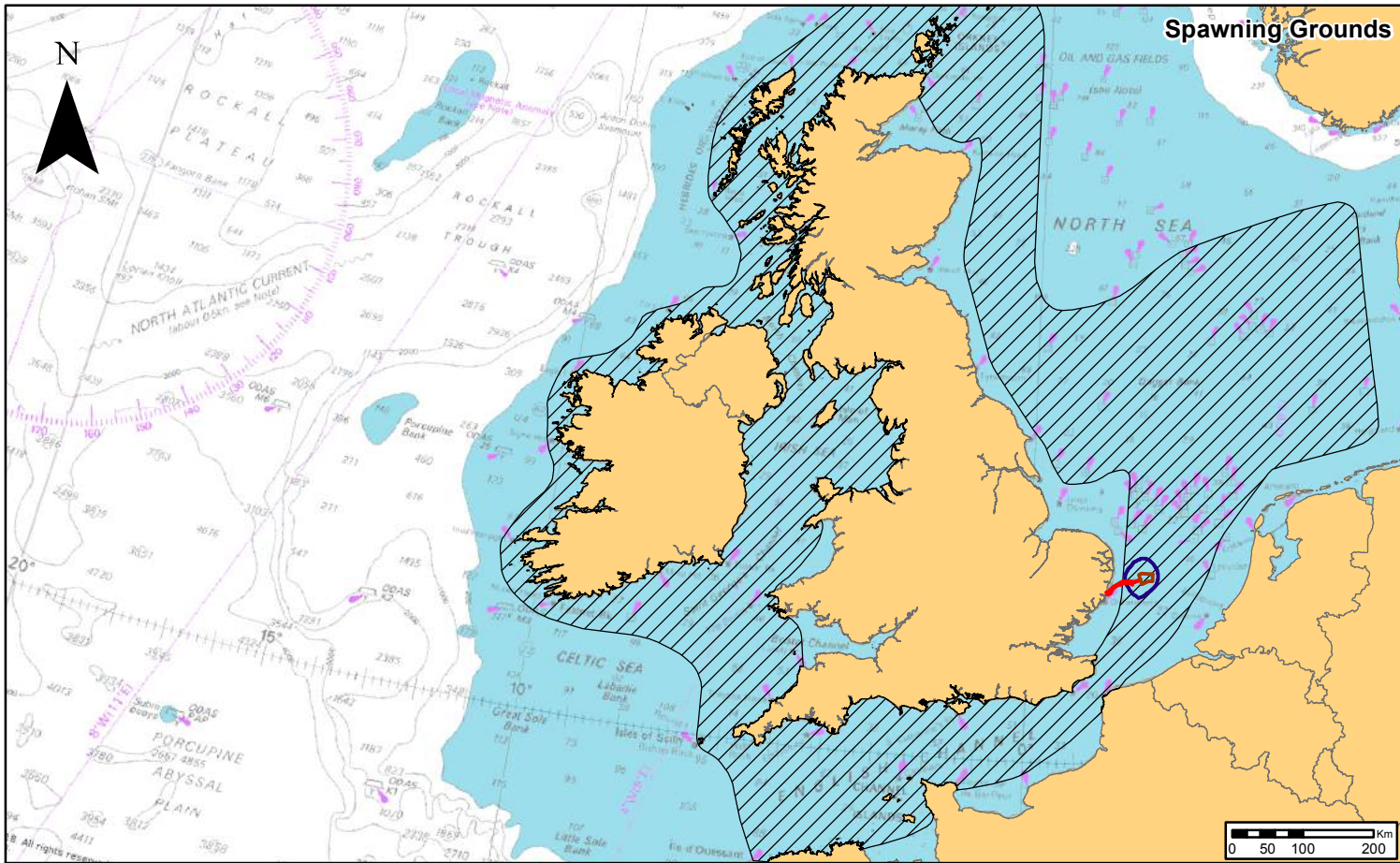
Checked: KC

Approved: PP

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East Anglia ONE North Herring Spawning and Nursery Grounds in Relation to Pin Pile Noise Impact Contour (2,400kJ)

Drg No	EA1N-DEV-DRG-IBR-000451	
Rev	1	Datum: WGS 1984 Projection: Zone 31N
Date	27/11/18	
Figure	10.39	



Legend

East Anglia ONE North Windfarm Site

East Anglia ONE North Offshore Cable Corridor

Sprat Spawning Grounds

Coull et al. 1998


Sprat

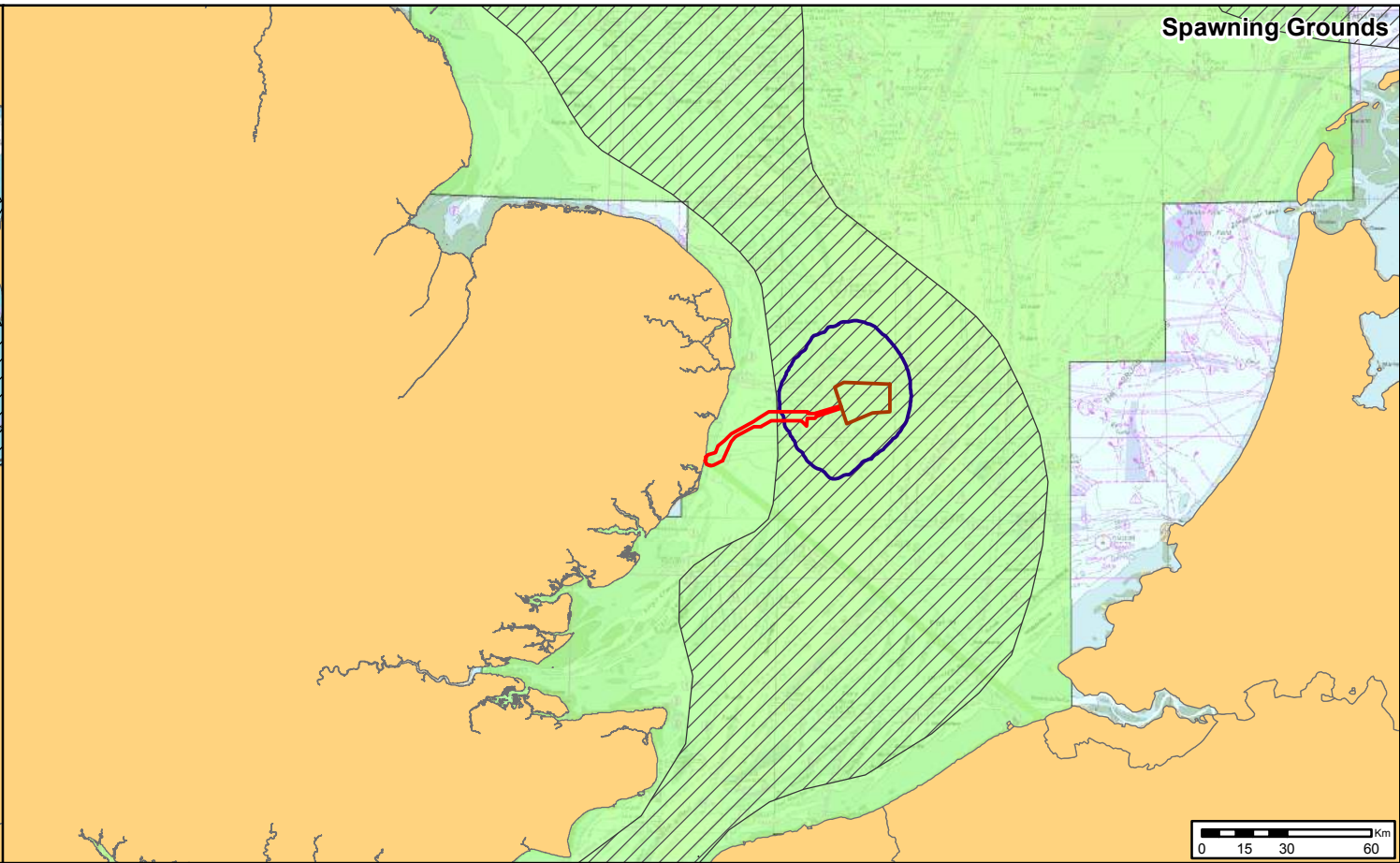
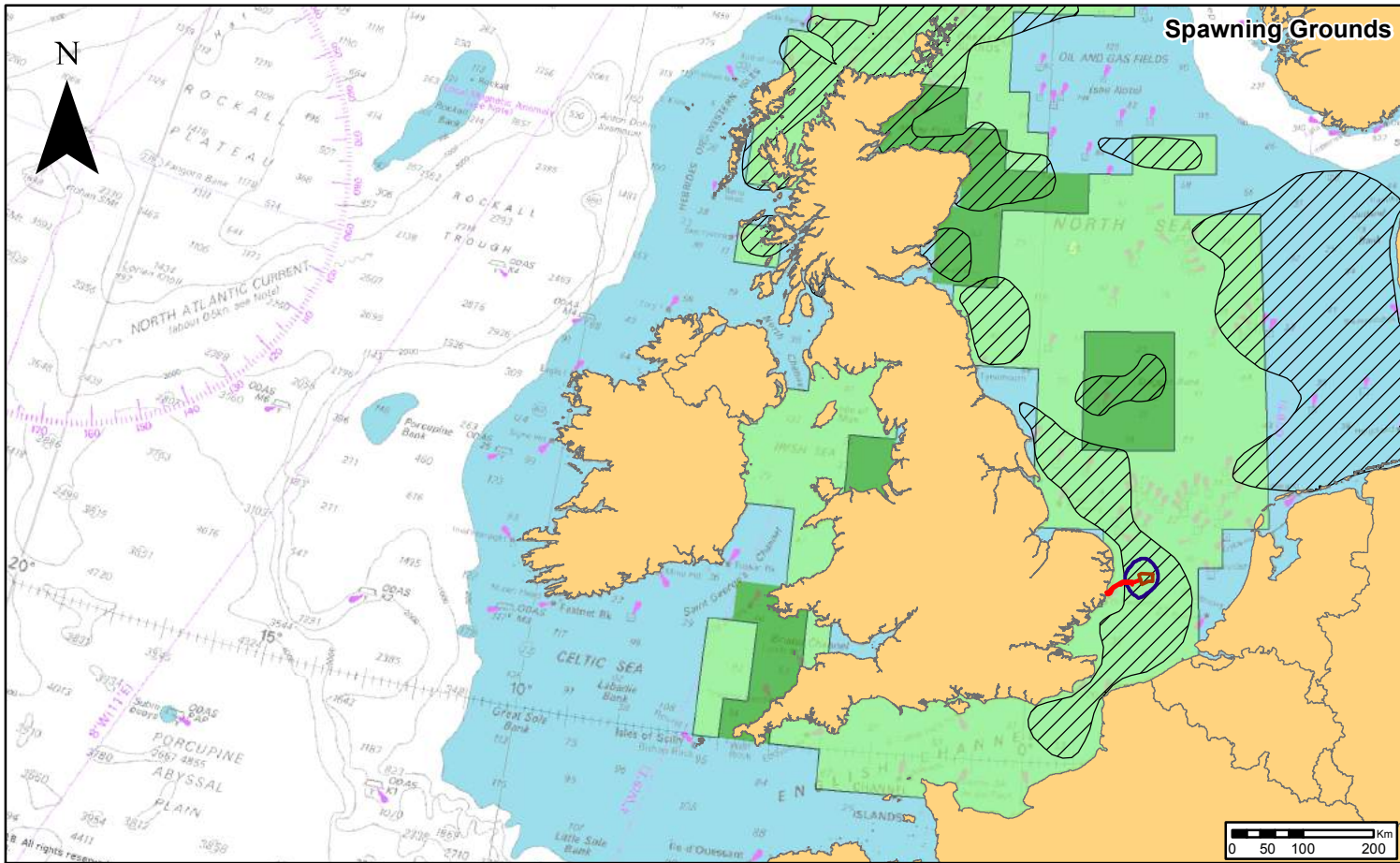
Sprat Nursery Grounds

Coull et al. 1998

Sprat

NMFS (2018) Unweighted SELcum of 186 dB re 1 μ Pa²s for TTS from Pin Pile Installation with Maximum Hammer Energy (2,400kJ)

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Legend

- East Anglia ONE North Windfarm Site
- East Anglia ONE North Offshore Cable Corridor

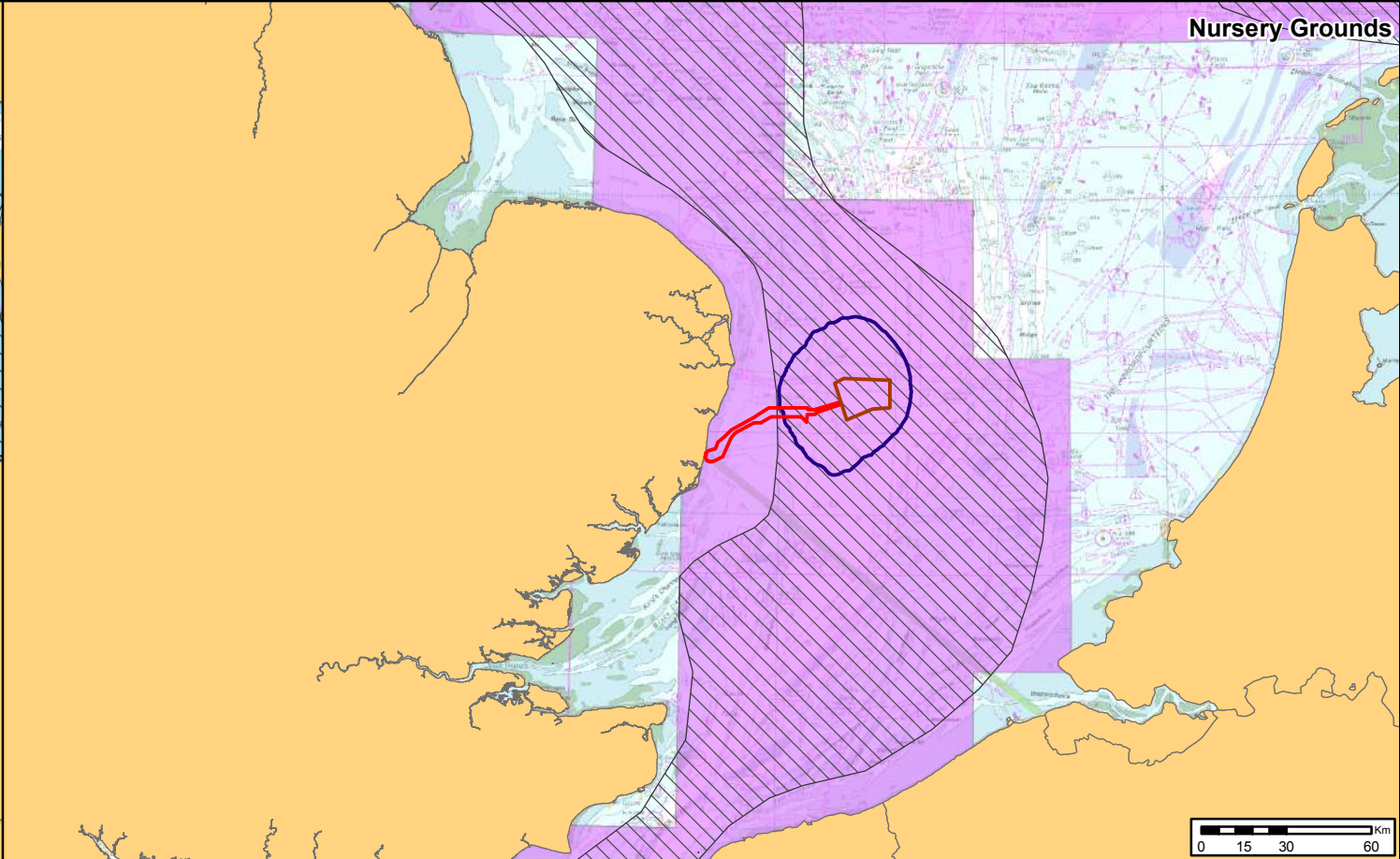
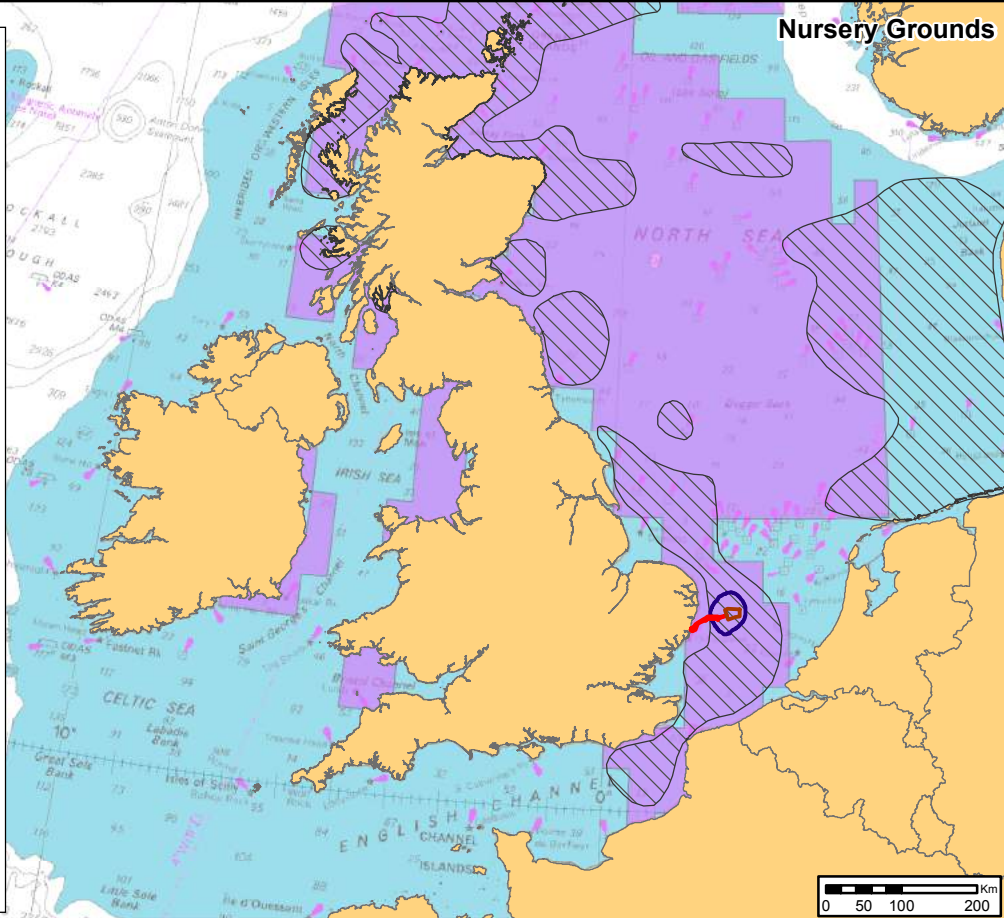
Sandeel Spawning Grounds

- Sandeel
- Ellis et al. 2010
- High Intensity
- Low Intensity

Sandeel Nursery Grounds

- Sandeel
- Ellis et al. 2010
- High Intensity
- Low Intensity

NMFS (2018) Unweighted SELcum of 186 dB re 1 $\mu\text{Pa}^2\text{s}$ for TTS from Pin Pile Installation with Maximum Hammer Energy (2,400kJ)



Rev	Date	By	Comment
1	27/11/2018	FC	First Issue.

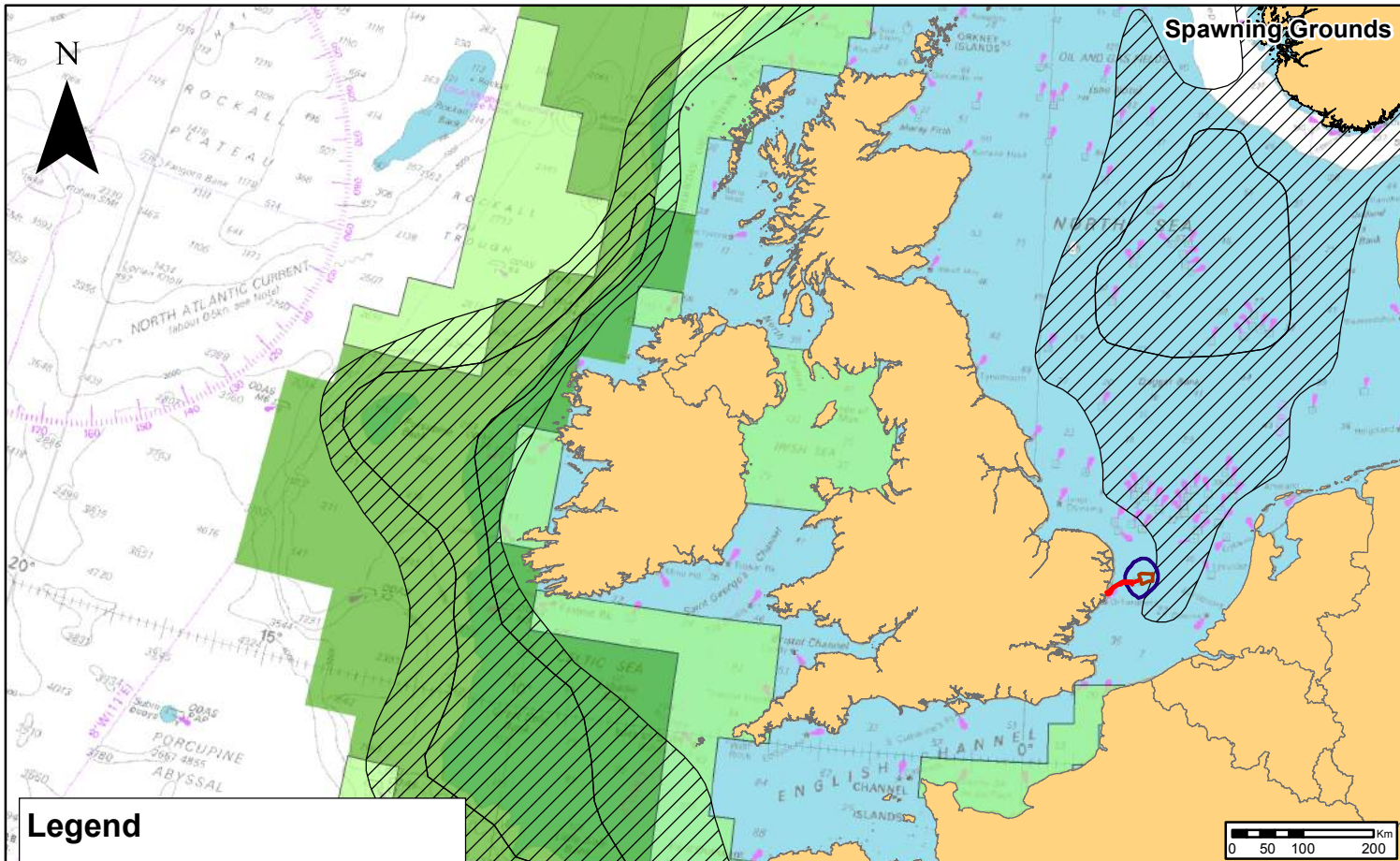
Prepared: FC
Checked: KC
Approved: PP

Scale @ A3

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East Anglia ONE North Sandeel Spawning and Nursery Grounds in Relation to Pin Pile Noise Impact Contour (2,400kJ)

Drg No	EA1N-DEV-DRG-IBR-000447	
Rev	1	Datum: WGS 1984 Projection: Zone 31N
Date	27/11/18	
Figure	10.41	



Legend

- East Anglia ONE North Windfarm Site
- East Anglia ONE North Offshore Cable Corridor

Mackerel Spawning Grounds

Coull et al. 1998

- Mackerel

Ellis et al. 2010

- High Intensity
- Low Intensity

Mackerel Nursery Grounds

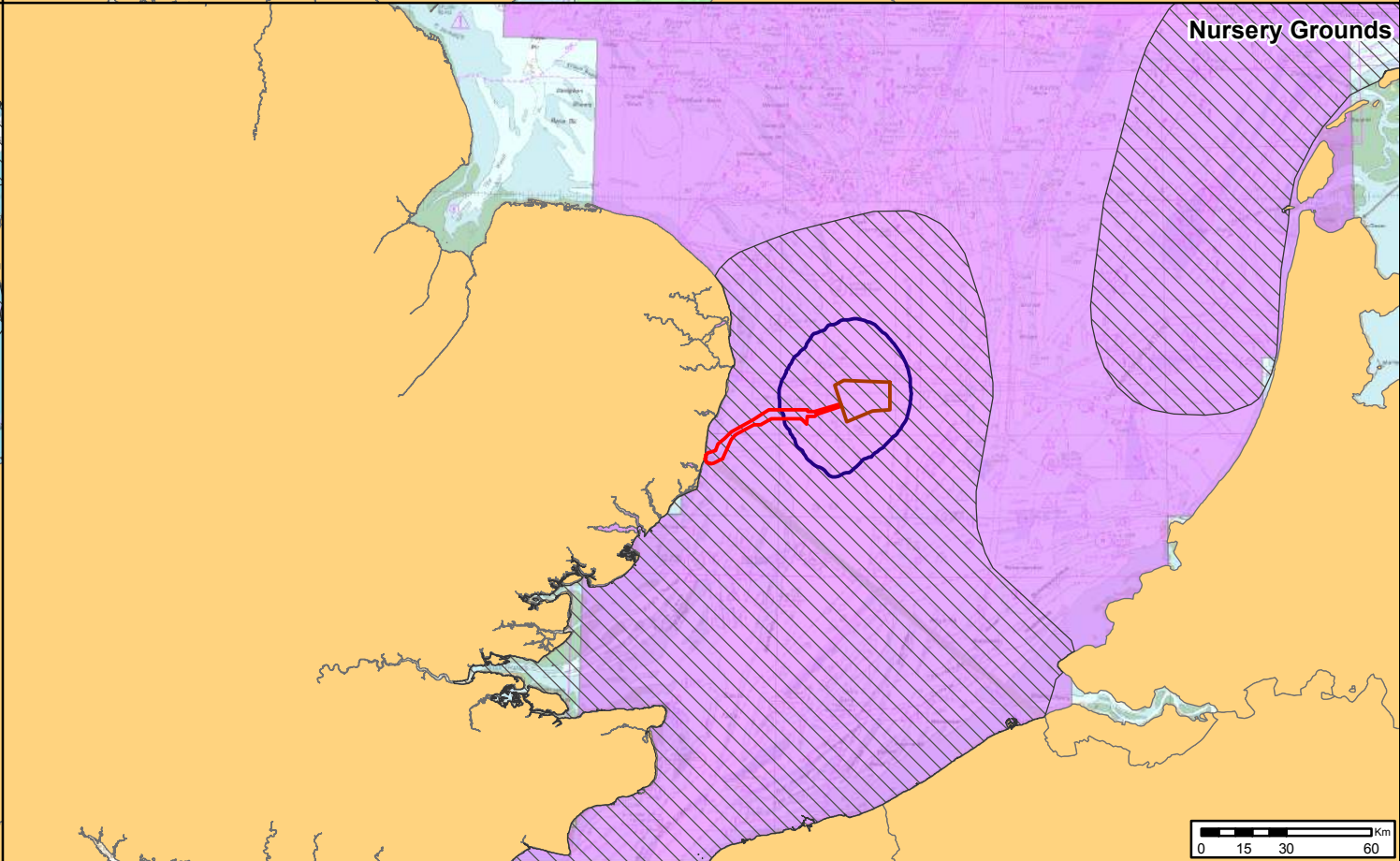
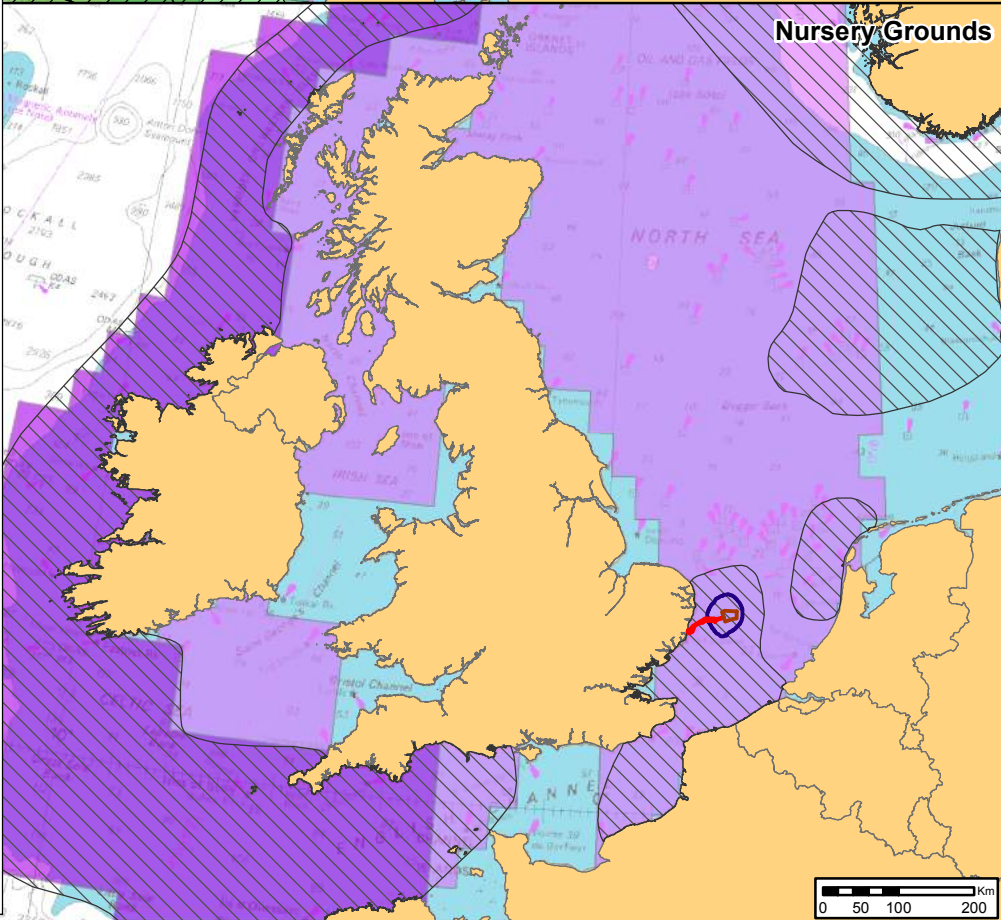
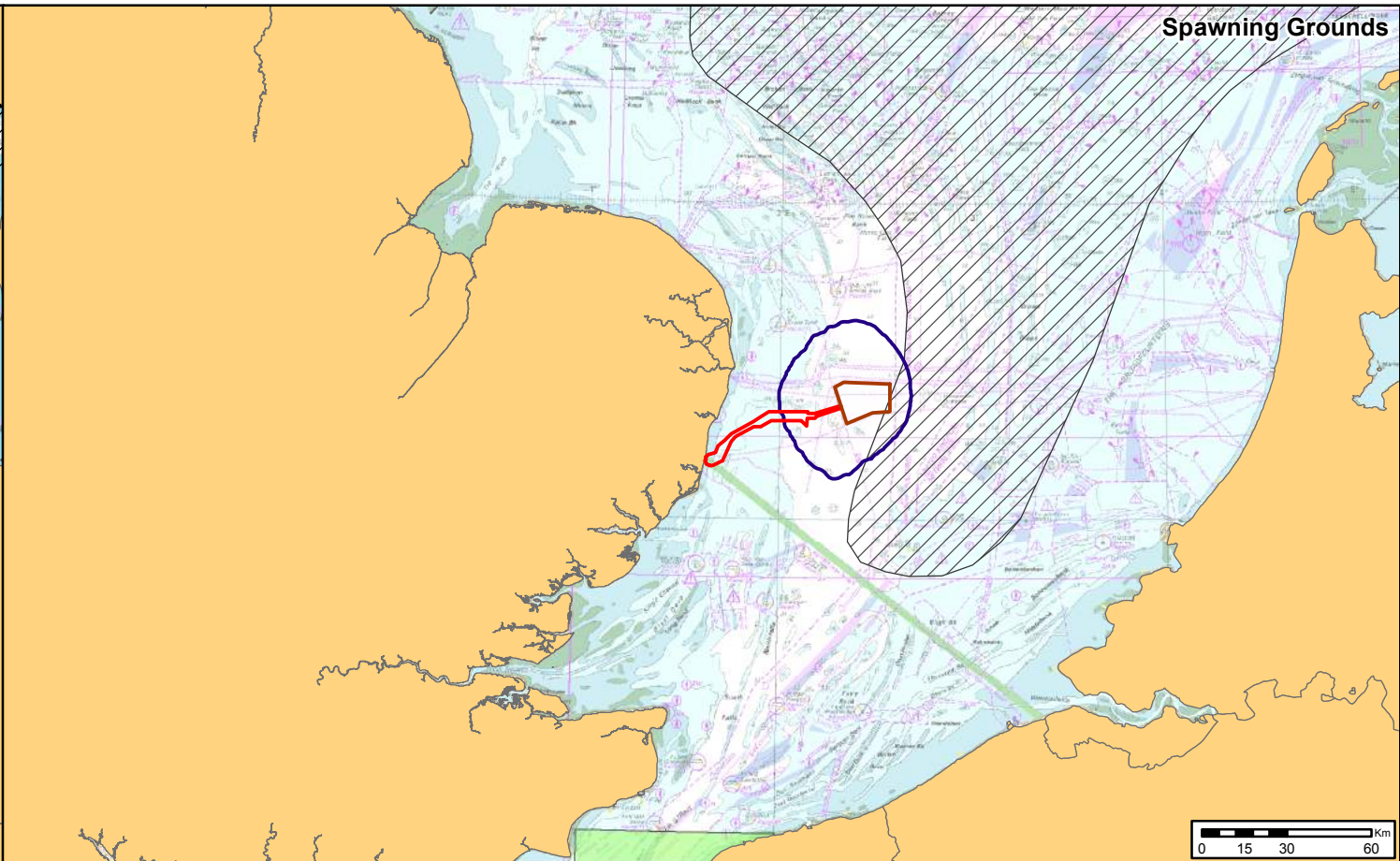
Coull et al. 1998

- Mackerel

Ellis et al. 2010

- High Intensity
- Low Intensity

NMFS (2018) Unweighted SELcum of 186 dB re 1 μ Pa²s for TTS from Pin Pile Installation with Maximum Hammer Energy (2,400kJ)



Rev	Date	By	Comment
1	27/11/2018	FC	First Issue.

Prepared:

FC

Scale @ A3

Checked:

KC

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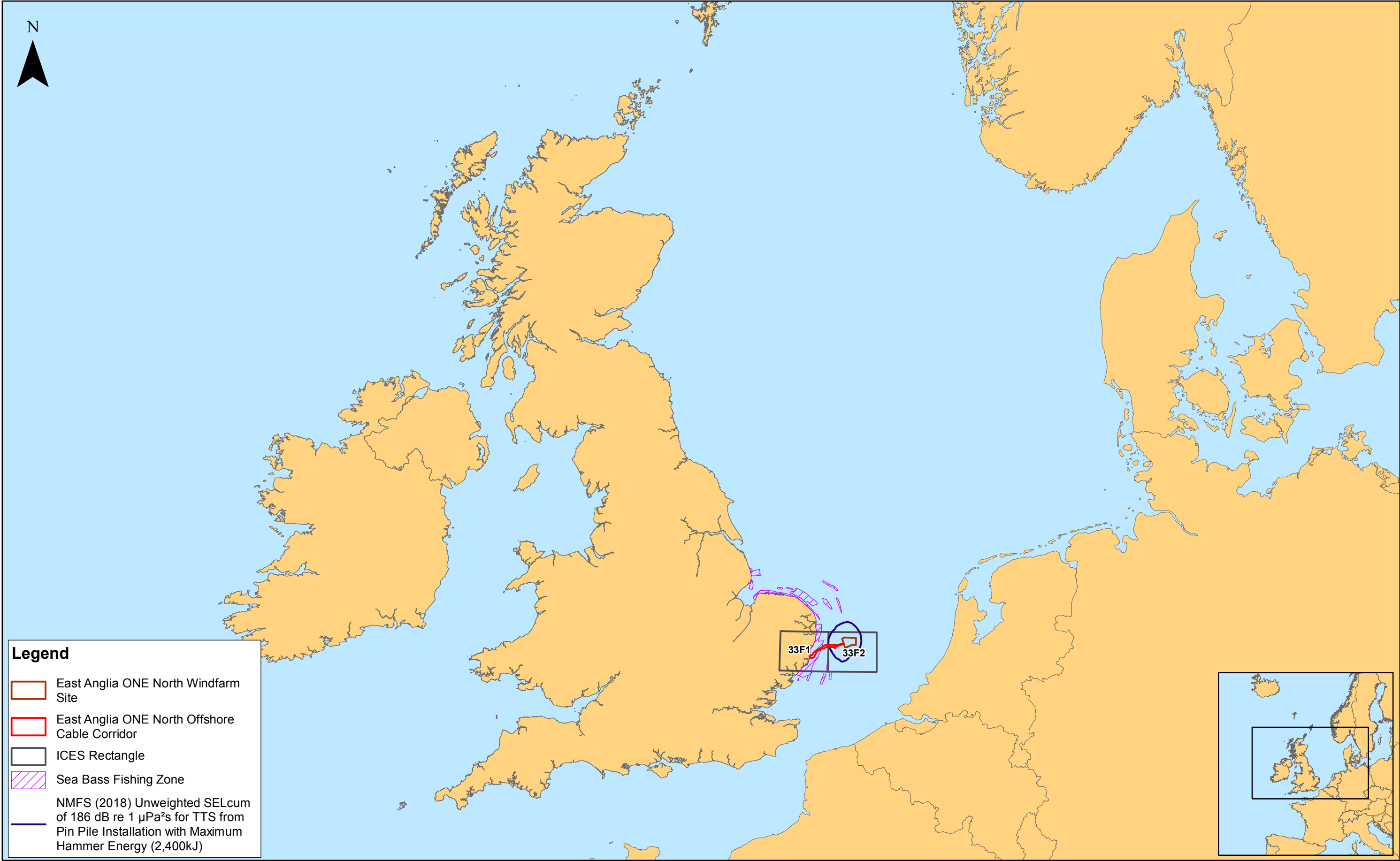
Approved:


PP

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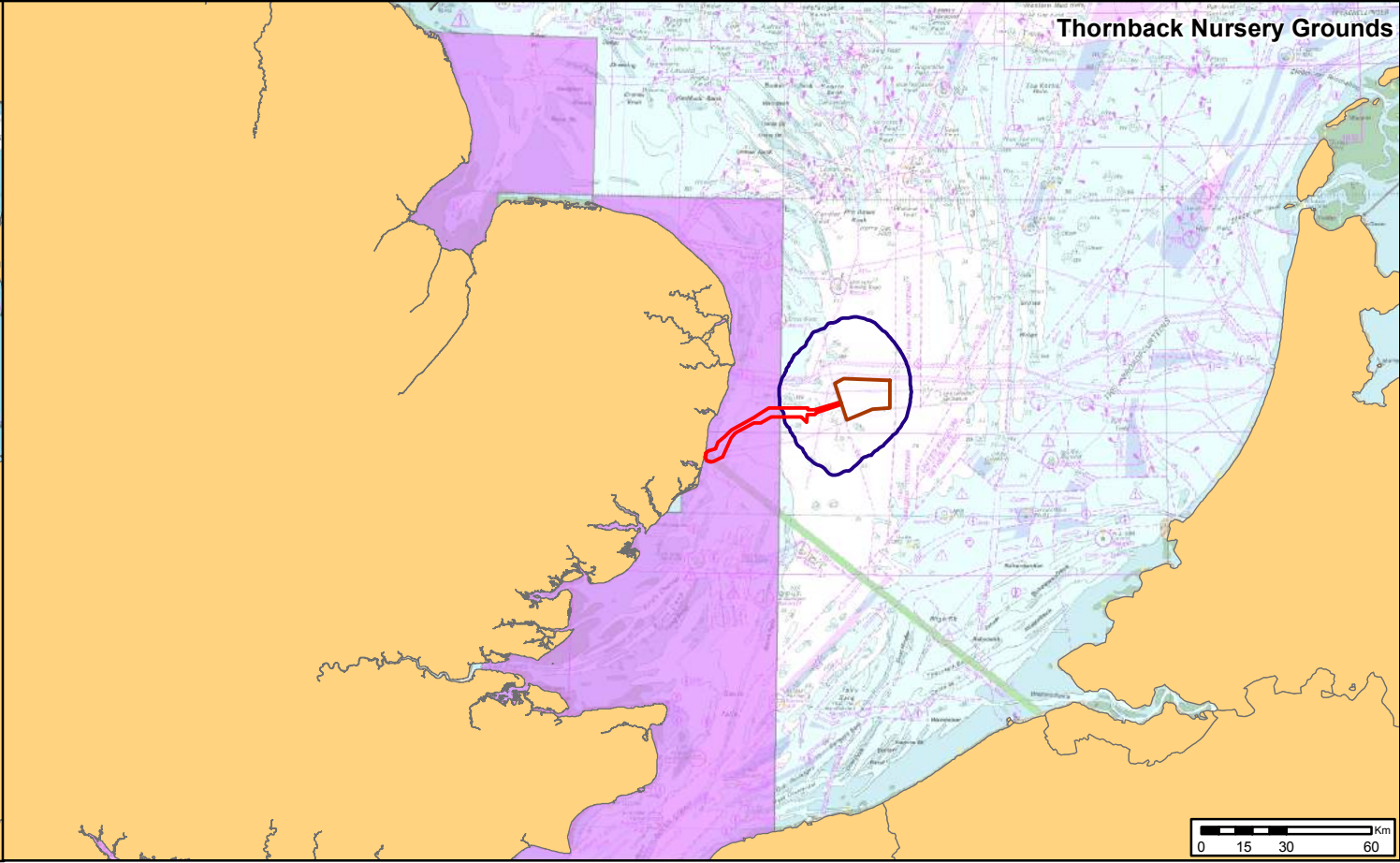
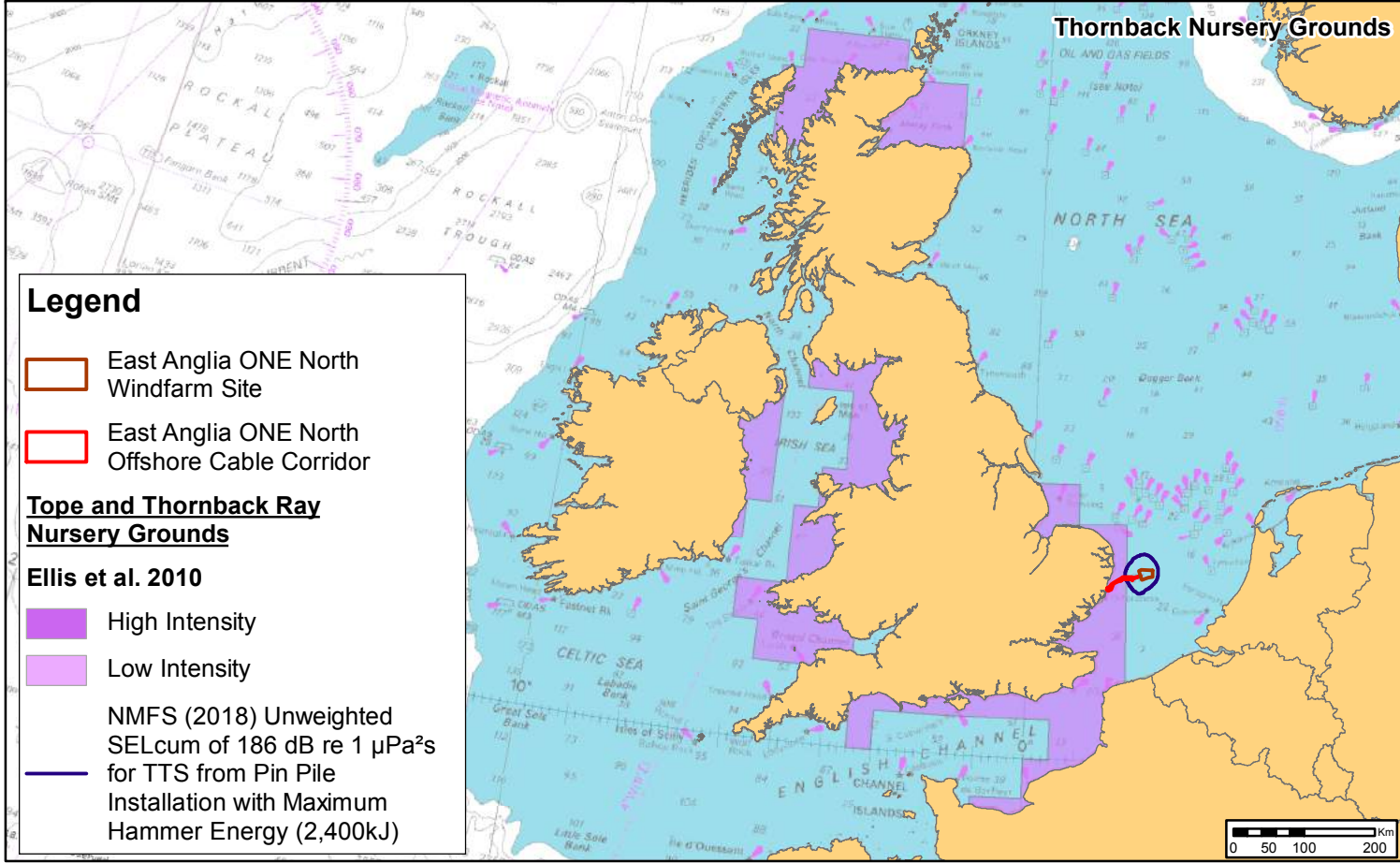
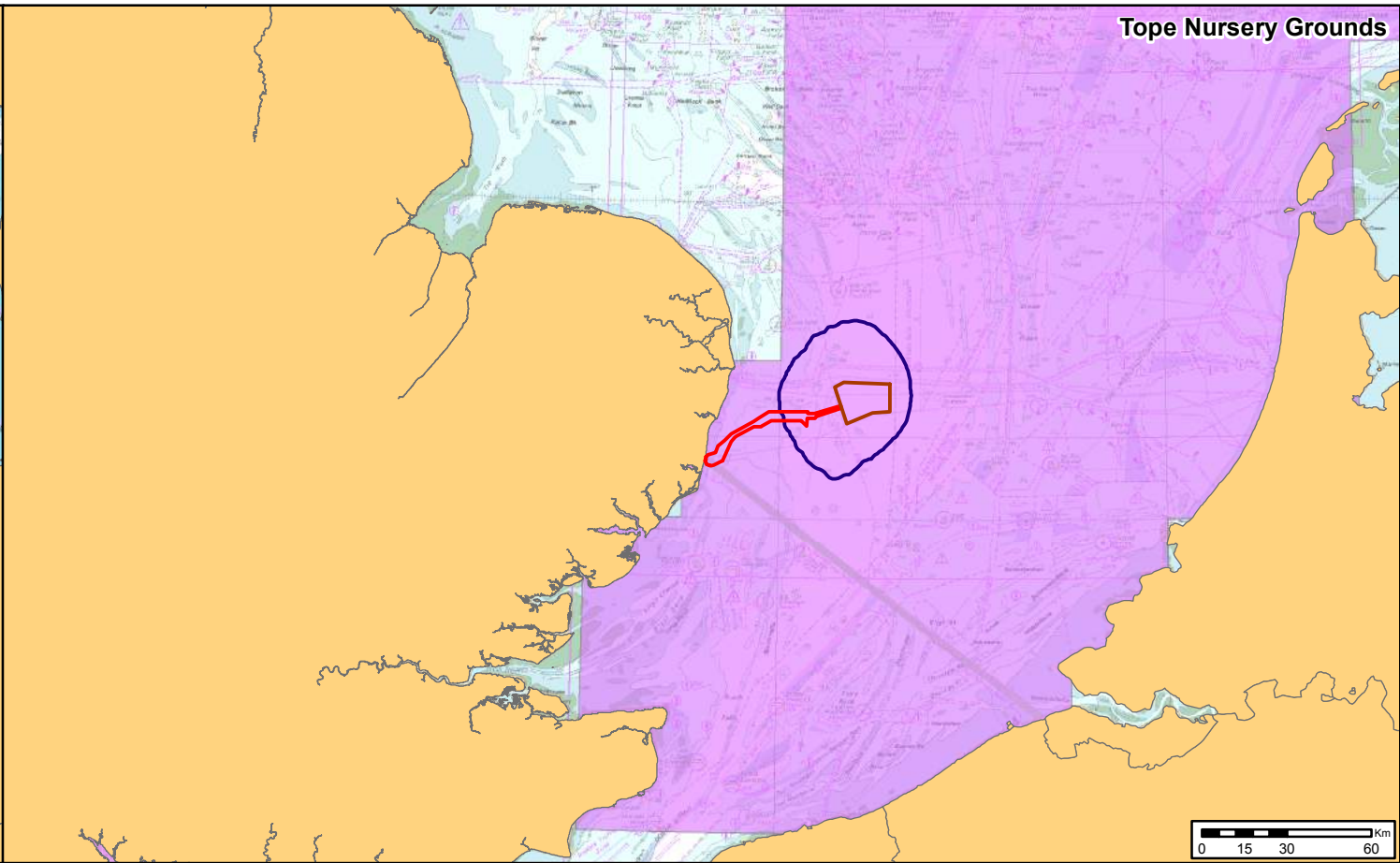
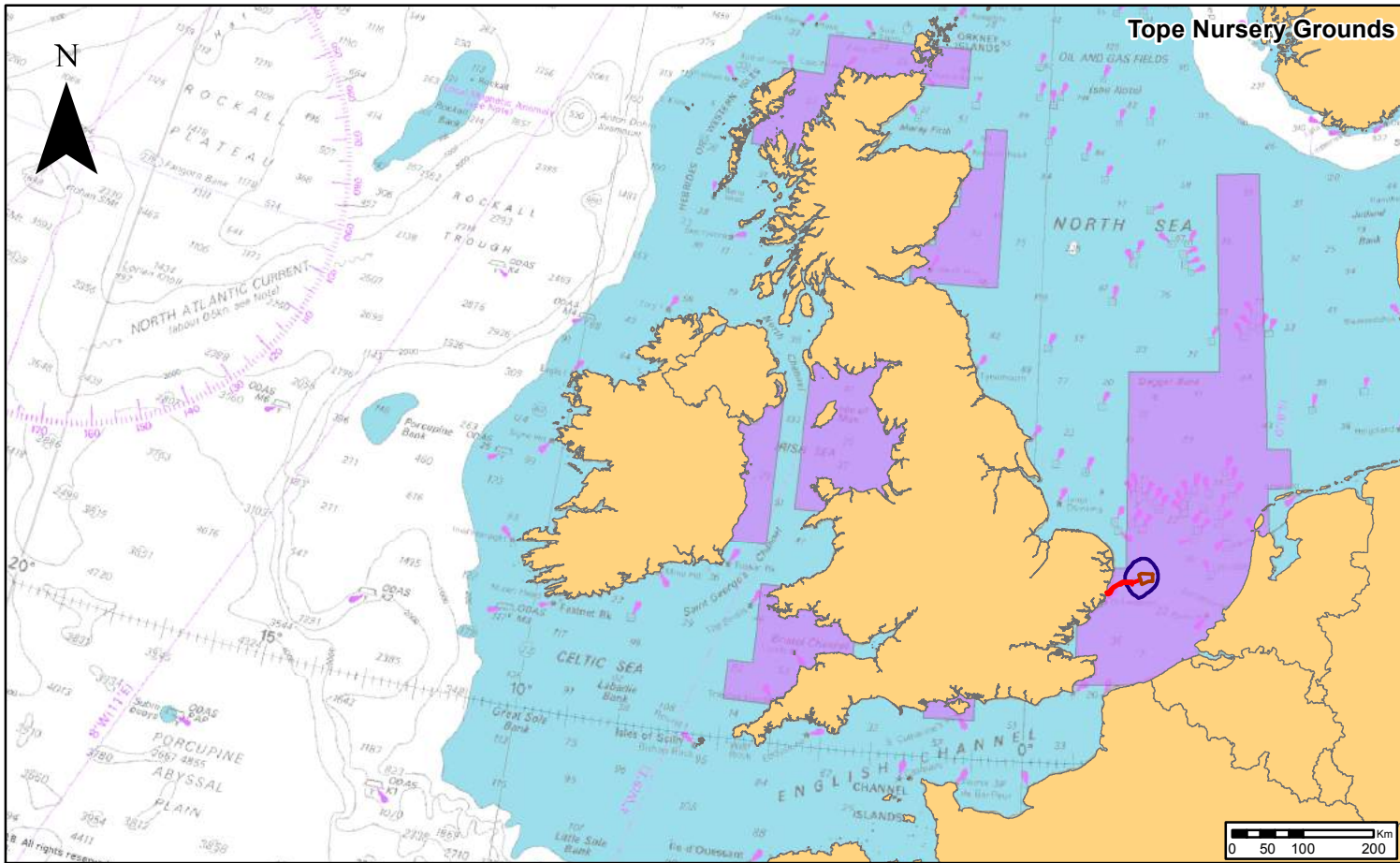
East Anglia ONE North
Mackerel Spawning and Nursery Grounds in
Relation to Pin Pile Noise Impact Contour
(2,400kJ)

Drg No	EA1N-DEV-DRG-IBR-000446	
Rev	1	Datum: WGS 1984 Projection: Zone 31N
Date	27/11/18	
Figure	10.42	





						1:5,000,000 Scale @ A3	0 75 150 300 Km	East Anglia ONE North Sea Bass Historic Fishing Areas in Relation to Pin Pile Noise Impact Contour (2,400kJ)	Drg No	EA1N-DEV-DRG-IBR-000453	
				Prepared:	FC				Rev	1	Datum: WGS 1984 Projection: Zone 31N
1	27/11/2018	FC	First Issue.	Checked:	KC				Date	27/11/18	
Rev	Date	By	Comment	Approved:	PP	<small>This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Offshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.</small>			Figure	10.43	



Legend

East Anglia ONE North Windfarm Site

East Anglia ONE North Offshore Cable Corridor


Tope and Thornback Ray Nursery Grounds

Ellis et al. 2010

High Intensity

Low Intensity

NMFS (2018) Unweighted SELcum of 186 dB re 1 μ Pa²s for TTS from Pin Pile Installation with Maximum Hammer Energy (2,400kJ)

										East Anglia ONE North Tope and Thornback Ray Nursery Grounds in Relation to Pin Pile Noise Impact Contour (2,400kJ)	Drg No	EA1N-DEV-DRG-IBR-000452	
					Prepared:	FC	Scale @ A3				Rev	1	Datum: WGS 1984 Projection: Zone 31N
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Rev	Date	By	Comment	Approved:	PP				Figure	10.44			