



# FLOOD RISK ASSESSMENT

K's Lakes  
Marsh Lane  
Orby  
Skegness  
PE24 5AJ

## **PREPARED BY**



# **VANGUARD 3D**

DRAUGHTING

DESIGN & DEVELOPMENT

24 HOLLAND DRIVE  
SKEGNESS  
LINCOLNSHIRE  
PE25 3NH

TEL: +44 1754 612686  
MOB: +44 7749 961713  
EMAIL: w.topley@vanguard-3d.com  
WEB: www.vanguard-3d.com

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## **ISSUE**

Issue 1            Created 04/08/23



## PROPOSED SCHEME

The proposal is for 5 number touring pitches located in the center of the site, 1 static wardens unit located on the South East corner of the site, a small toilet/shower block located on the Southern boundary center along with a waste compound as detailed on plan number 1989-23-02.

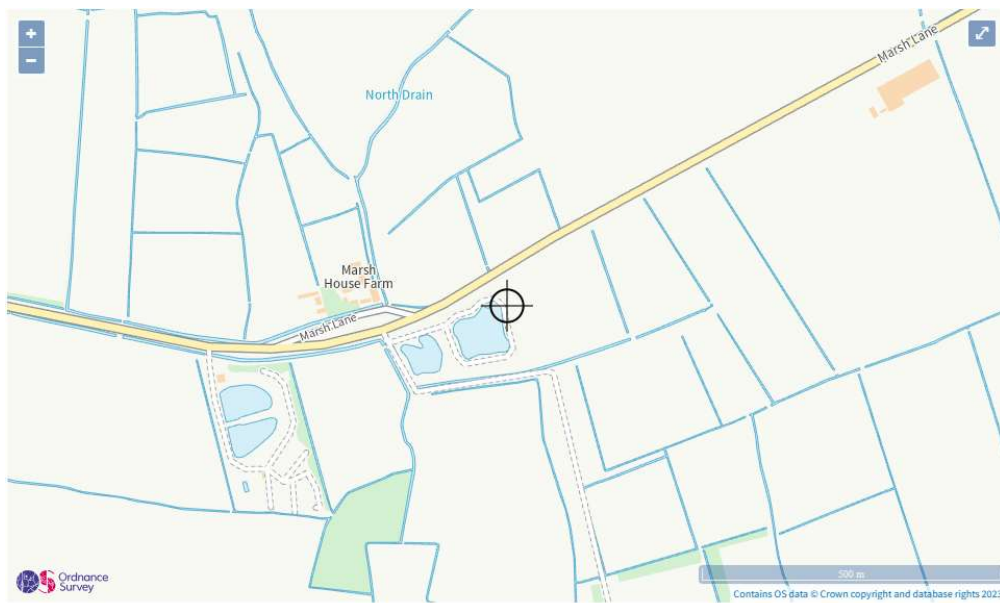
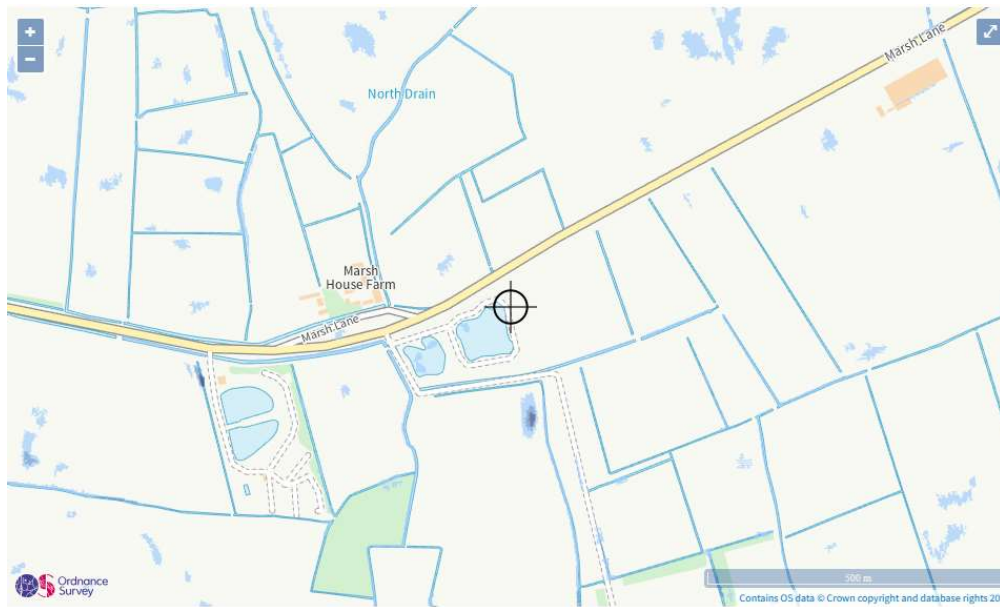
## FLOOD RISK

The proposed development is shown to be within Flood Zone 3 as shown on the Environment Agency's flood zone map.



The National Planning Policy Framework Technical Guidance (NPPF TG) gives three levels of flood risk based on the probability of the occurrence of flooding with general guidance for reducing future damage to property and loss of life which are to be considered as part of the planning process. Developments in high risk areas should be restricted or designed to enable them to be undertaken with appropriate measures to reduce risk.

Zone 1	Low Probability	( <0.1% )
Zone 2	Medium Probability	( 0.1% - 1.0% )
Zone 3/3A	High Probability	( >1.0% )



## FLOOD HISTORY

The Environment Agency has advised that they have no records of flooding around the application site. In addition, historic maps show that the east coast flood in 1953 did not extend as far in land as the application site.

## **ASSESSMENT OF POTENTIAL SOURCES OF FLOODING**

This section presents an assessment of Flood Risk to the development from

- a) external sources
- b) potential of the proposed development to cause flood risk elsewhere

Source	Significant	Comment
Fluvial	Low	Local watercourses and drains
Tidal/Coastal	Low	Only if a significant breach or over topping of the defences occurred in the future
Pluvial (drainage)	Low	On site run off
Groundwater	No	Unlikely due to local drainage network
Overland Flow	No	No higher ground adjacent to the site
Blockage	No	No culverts or bridges close to the site
Infrastructure Failure	No	No major infrastructure has been identified
Rainfall Ponding	No	No depressed areas which could encourage ponding

## **POTENTIAL OF THE DEVELOPMENT TO CAUSE FLOODING**

The areas being developed comprise of existing grass land. There are no formal surface water discharge systems in the proposed locations. The development will introduce permeable surfaces into the site therefore, not increasing flood risk elsewhere. The proposed development is surrounded by bunding ranging from approximately 3m to 1m in height, if required the entrance to this area could be modified to enclose the area completely if required.

## **MITIGATION MEASURES**

A precautionary approach should be adopted to ensure that the development is safe and not exposed unnecessarily to flooding. The following mitigation measures are therefore recommended for the development.

- The robust Flood Warning & Evacuation Plan (FWEP) should be put in place. This Plan will ensure that guests/visitors are satisfactorily prepared for a flood event and can safely escape from the site should such an event occur.
- As part of the FWEP the park will register with the Environment Agency's 'Warnings Direct' flood warning system. The Agency provides this flood warning service in England and Wales and supports the public acting to prepare and respond when these warnings are issued. The warnings are provided for flooding from rivers and the sea but not for localised flash flooding that cannot be predicted, for example from blocked or overloaded sewers or local groundwater flooding. The Agency issues warnings through media on TV and radio weather bulletins and on its website ([www.environment-agency.gov.uk/floodline](http://www.environment-agency.gov.uk/floodline)). In areas of risk, the Agency can send a warning message direct to people at home or at work by telephone, fax or pager using an Automatic Voice Messaging (AVM) system.
- The warning system will be used to provide the sites flood marshal with information on the severity of the predicted flood. Depending on the severity different procedures will be put into place; with the most extreme being a full evacuation of the site to higher/safer ground (which is only a short distance to the west in the village center). A copy of the Evacuation Plan and a map to show the route to the safer ground will be positioned in a prominent place on site. Mobile phone contact numbers will be requested from all guests so that the marshal can contact them in the event of an emergency.
- Flooding events are generally predicted with a two-hour warning being given on pending events and the road network is adequate to allow escape inland in the event of an unpredicted flooding event.

## **CONCLUSIONS**

The following conclusions are as follows:

- The potential sources of flood risk have been discussed within this report. It has been established that tidal flooding is the potential future source of flood risk in the area.
- The Flood Maps show that the site could be affected if a breach or overtopping of the sea defences occurred. The likelihood of a breach in the defences is considered low given their current good condition and the commitment by the Humber Estuary Coastal Authorities Group to maintain and raise the defences in the medium- and long-term future. The risk from overtopping is low given the distance between the site and the defences.
- The proposed caravan pitches will be situated on areas of fully permeable gravel grid system thus maintaining the existing infiltration mechanisms of the site. The permanent building will be able to discharge surface water via sustainable methods i.e. via the pond or into the adjacent watercourse.
- A robust flood warning and evacuation system will be put in place as part of the proposal.

The site has been identified in an area that is at risk from flooding, however national planning policy emphasises the need for a balanced flexible approach which addresses the risks of flooding whilst recognising the benefits of development. It is considered that the risk of flooding is real but relatively low. Flooding events are generally predicted with a two-hour warning being given on pending events and the road network is adequate to allow escape in the event of an unpredicted flooding event. The mitigation measures proposed in this report will reduce the risk to property and human life.

## **ESCAPE ROUTES**

See flood warning and evacuation plan.



# Flood Map for Planning centred on TF 51482 67265 - created August 2023 [Ref: CCN-2023-321478]



Scale 1:10,000

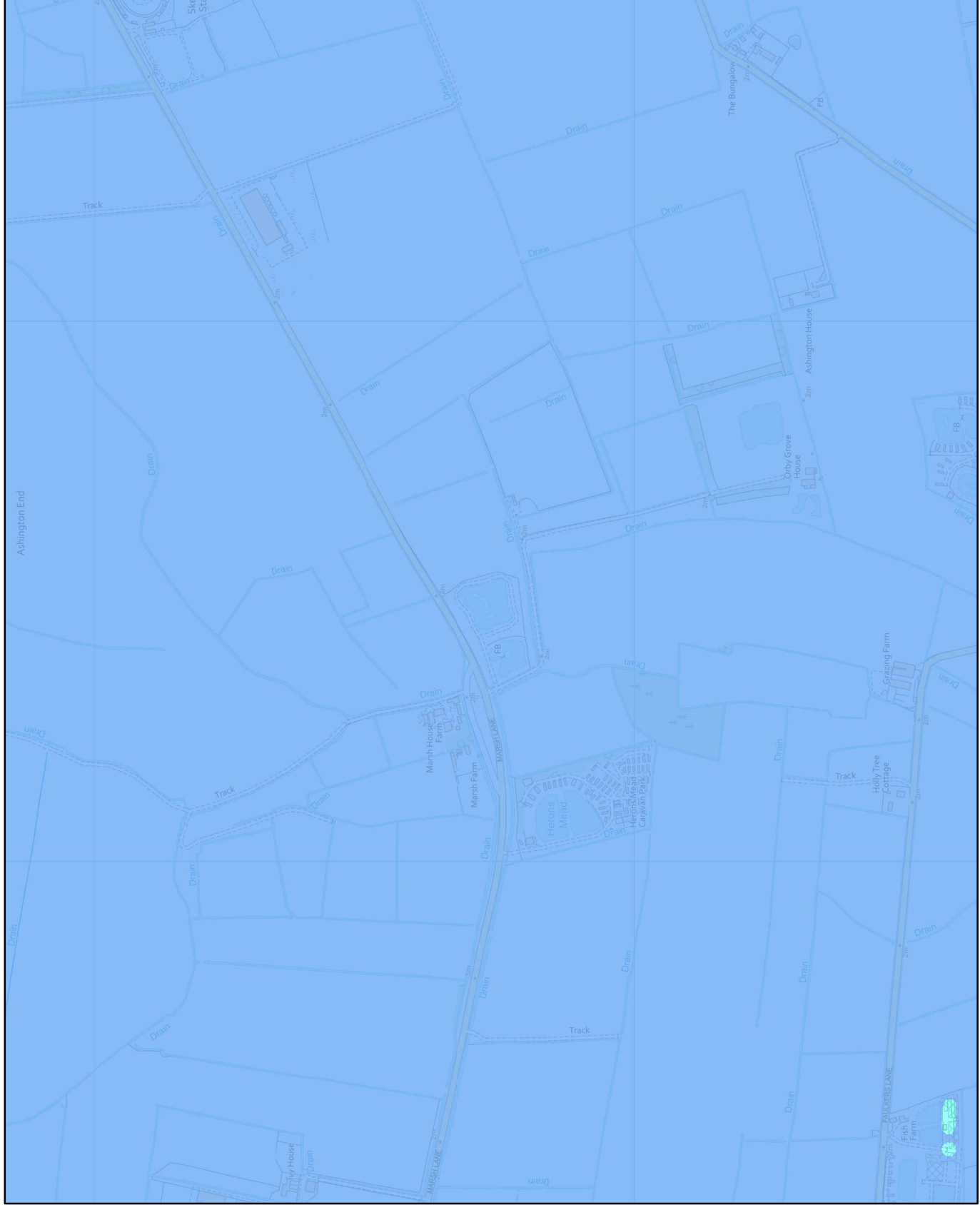
**Legend**

- Main River
- Raised Defences
- Areas at Risk of Flooding from Rivers and Sea
- Extreme Flood Outline

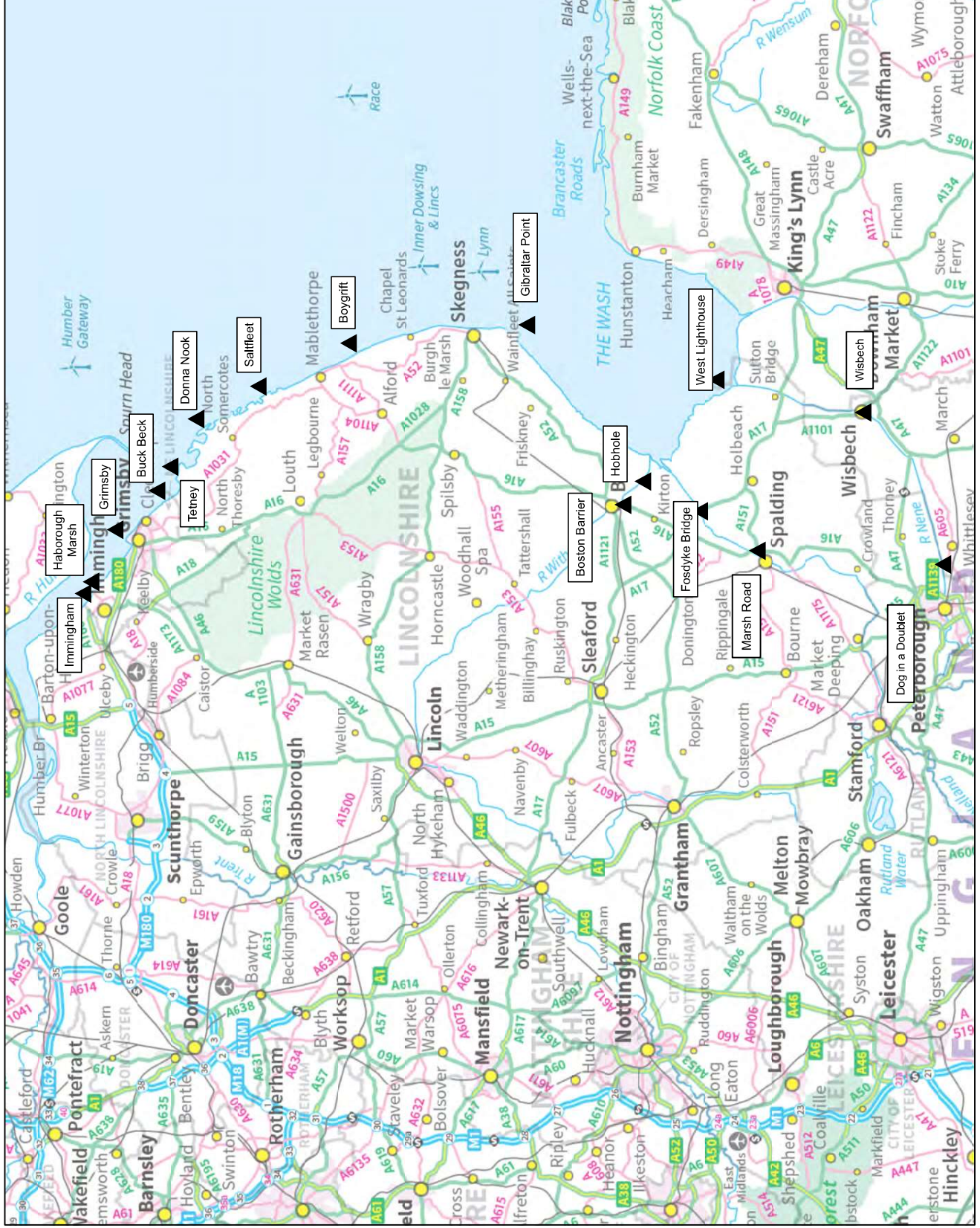
Dark blue shows the area that could be affected by flooding, either from rivers or the sea, if there were no flood defences. This area could be flooded:  
- from the sea by a flood that has a 0.5% (1 in 200) or greater chance of happening each year.  
- or from a river by a flood that has a 1% (1 in 100) or greater chance of happening each year.

Light blue shows the extent of the Extreme Flood Outline, which represents the extent of a flood event with a 0.1% chance of occurring in any year, or the highest recorded historic extent if greater.

These two colours show the extent of the natural floodplain if there were no flood defences or certain other manmade structures and channel improvements. Sites outside the two extents, but behind raised defences, may be affected by flooding if the defences are overtopped or fail.



# East Coast and Wash - 2018 Coastal Flood Boundary [CFB] Dataset Key Node Points



Scale 1:550,000

▲ East Coast and Wash

See separate data sheet for predicted flood levels

Created by the Partnerships and Strategic Overview Team, Lincoln

# East Coast and Wash: Immingham to the West Lighthouse

## 2018 Coastal Flood Boundary Extreme Sea Levels

CFB REF	LOCATION	EASTING	NORTHING	ANNUAL CHANGE ( 1 IN X ) OF TIDE LEVEL IN METRES ODN																				
				1			10			50			100			200			300			1000		
				Confidence Bound			Confidence Bound			Confidence Bound			Confidence Bound			Confidence Bound			Confidence Bound			Confidence Bound		
				2.5%	50%	97.5%	2.5%	50%	97.5%	2.5%	50%	97.5%	2.5%	50%	97.5%	2.5%	50%	97.5%	2.5%	50%	97.5%	2.5%	50%	97.5%
3888	Immingham	520440	417625	4.16	4.17	4.19	4.50	4.53	4.62	4.73	4.80	5.00	4.83	4.93	5.19	4.93	5.06	5.41	4.98	5.14	5.55	5.15	5.38	6.01
3890	Haborough Marsh	522100	416512	4.14	4.15	4.17	4.48	4.51	4.60	4.70	4.77	4.97	4.80	4.90	5.16	4.90	5.03	5.38	4.94	5.10	5.51	5.11	5.34	5.97
3898	Grimsby	529295	413162	3.98	3.99	4.01	4.31	4.34	4.43	4.53	4.60	4.80	4.61	4.71	4.97	4.71	4.84	5.19	4.74	4.90	5.31	4.88	5.11	5.74
3906	Buck Beck	534709	407369	3.87	3.88	3.90	4.19	4.23	4.31	4.41	4.50	4.68	4.50	4.61	4.86	4.61	4.75	5.10	4.64	4.82	5.22	4.80	5.05	5.66
3910	Tetney	538035	405537	3.85	3.86	3.89	4.17	4.22	4.30	4.40	4.50	4.67	4.49	4.61	4.86	4.60	4.75	5.10	4.63	4.82	5.21	4.80	5.06	5.66
3918	Donna Nook	544641	401997	3.82	3.83	3.86	4.14	4.19	4.27	4.38	4.48	4.65	4.47	4.60	4.85	4.58	4.74	5.10	4.63	4.82	5.22	4.81	5.08	5.68
3928	Saltfleet	549131	393360	3.78	3.79	3.82	4.11	4.16	4.26	4.36	4.46	4.64	4.47	4.59	4.86	4.57	4.74	5.11	4.63	4.83	5.25	4.83	5.11	5.74
3942	Boygriff	555131	380860	3.72	3.74	3.77	4.06	4.11	4.22	4.33	4.43	4.65	4.43	4.57	4.87	4.56	4.73	5.13	4.62	4.83	5.28	4.85	5.15	5.82
3968	Gibraltar Point	557652	356181	4.16	4.17	4.20	4.51	4.56	4.67	4.76	4.85	5.08	4.85	4.97	5.27	4.94	5.10	5.49	4.99	5.18	5.63	5.14	5.41	6.09
3992_14	Hobhole	535990	340116	4.96	4.97	5.01	5.40	5.44	5.56	5.66	5.76	5.98	5.78	5.90	6.20	5.88	6.04	6.44	5.92	6.11	6.57	6.03	6.31	6.99
	Grand Sluice*	532366	344510	4.93	4.94	4.98	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
3992_9	Boston Barrier	532754	342852	4.93	4.94	4.98	5.41	5.45	5.57	5.73	5.83	6.05	5.85	5.97	6.27	5.93	6.09	6.49	5.94	6.13	6.59	5.98	6.26	6.94
3992_5	Fosdyke Bridge	531886	332234	4.87	4.88	4.92	5.31	5.35	5.47	5.58	5.68	5.90	5.71	5.83	6.13	5.82	5.98	6.38	5.87	6.06	6.52	6.01	6.29	6.97
4008	West Lighthouse	550094	329971	4.87	4.88	4.91	5.21	5.26	5.37	5.46	5.56	5.78	5.56	5.68	5.98	5.66	5.82	6.21	5.71	5.90	6.35	5.86	6.14	6.81
-	Marsh Road	525988	324065	-	5.04	-	-	5.44	-	-	5.73	-	-	5.85	-	-	5.98	-	-	-	-	-	-	-
-	Wisbech	546110	309940	-	4.83	-	-	5.25	-	-	5.53	-	-	5.66	-	-	5.78	-	-	-	-	-	-	-
-	Dog-in-a-Doublet	527200	299287	-	3.67	-	-	4.00	-	-	4.22	-	-	4.32	-	-	4.42	-	-	-	-	-	-	-

See next page for notes

# East Coast and Wash: Immingham to the West Lighthouse

## 2018 Coastal Flood Boundary Extreme Sea Levels

### NOTES:

The following notes apply to all CFB sites (ie all on table excluding Marsh Road, Wisbech, Dog-in-a-Doublet)

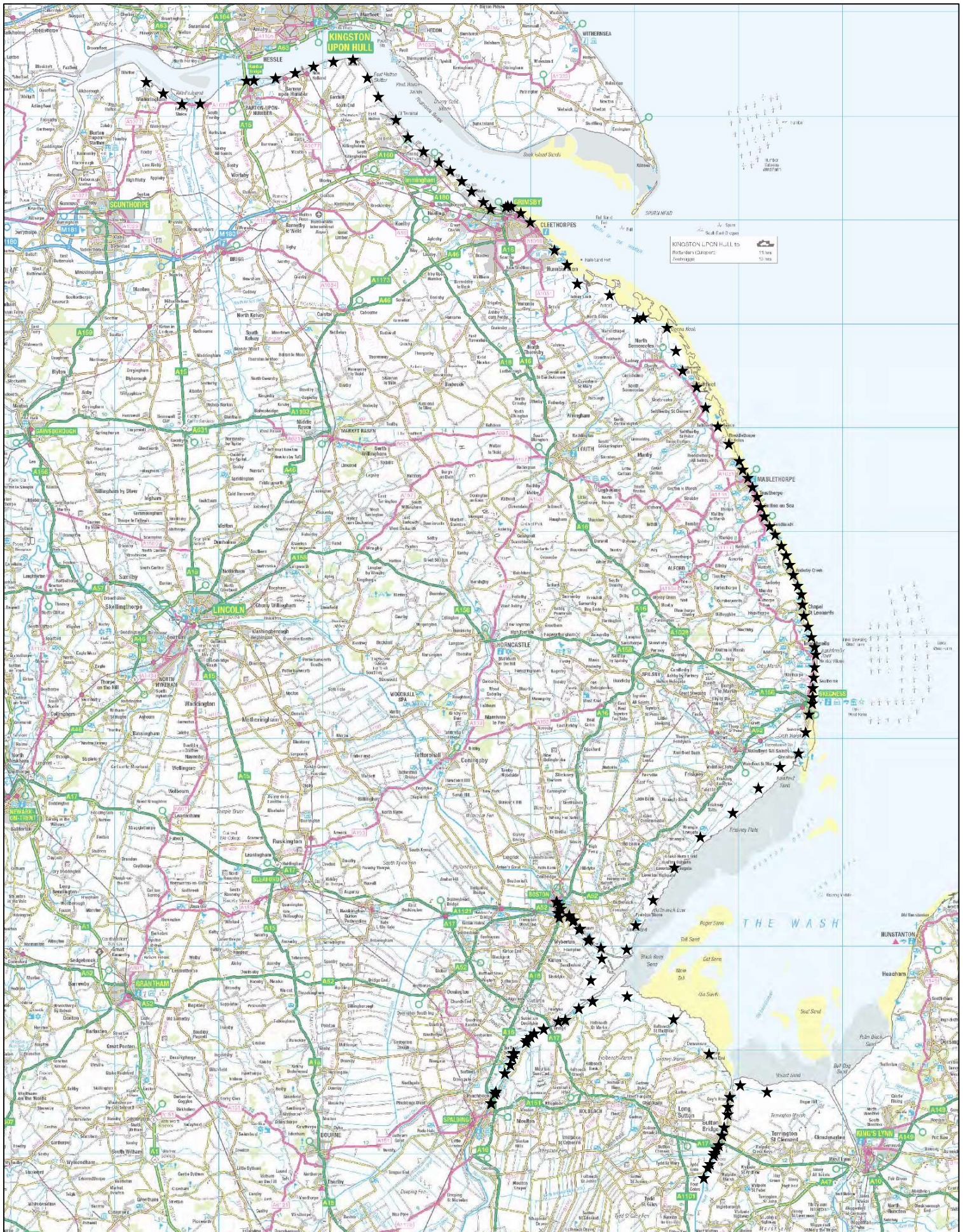
- The base date for the data is 2017.
- The levels are still water levels. Depending on the use of the data it may be necessary to consider wave heights and / or joint probability analysis of water level and other variables.
- Levels for other annual chance probabilities are available if required.
- For additional information relating to the 2018 Coastal Flood Boundary Extreme Sea Levels or to access the full dataset for the above sites or intermediate locations refer to the Defra Metadata Catalogue at <https://deframetadata.com/geonetwork/srv/eng/catalog.search#/metadata/84a5c7c0-d465-11e4-b0bd-f0def148f590>

The following notes apply to all Marsh Road, Wisbech, Dog-in-a-Doublet

- The base date for the data is 2006
- The levels are still water levels. Depending on the use of the data it may be necessary to consider wave heights and / or joint probability analysis of water level and other variables.
- Levels for other annual chance probabilities are available if required.
- These levels will be updated as their respective tidal river models are updated.

The following notes apply to Grand Sluice

- The data is based on CFB 2018 data for Boston Barrier site, capped at 5.3mAOD to reflect use of the barrier.
- The base date for the data is 2017
- The levels are still water levels. Depending on the use of the data it may be necessary to consider wave heights and / or joint probability analysis of water level and other variables.
- For additional information relating to the 2018 Coastal Flood Boundary Extreme Sea Levels or to access the full dataset for the above sites or intermediate locations refer to the Defra Metadata Catalogue at <https://deframetadata.com/geonetwork/srv/eng/catalog.search#/metadata/84a5c7c0-d465-11e4-b0bd-f0def148f590>



★ **Modelled Breach Locations**



This map indicates the location of where we have modelled the consequence of breaches in the defences along the coastline and tidal rivers. We have mapped the maximum values of Hazard Rating (Danger to People), Depth and Velocity.

We have not assumed that all breaches occur at the same time, but have modelled each breach individually and overlaid the results to find the maximum values.

Our modelling only considers the consequences of a breach, it does not make any assumption about the likelihood of a breach occurring. Our defences generally provide a good standard of flood defence but a risk of breaching remains.

Please contact the Environment Agency for information on how these maps are used in the management of flood risk.

General Enquiries No: 03708 506 506.

Weekday calls cost 5p plus up to 6ppm from BT Weekend Unlimited. Mobile and other providers charges may vary.



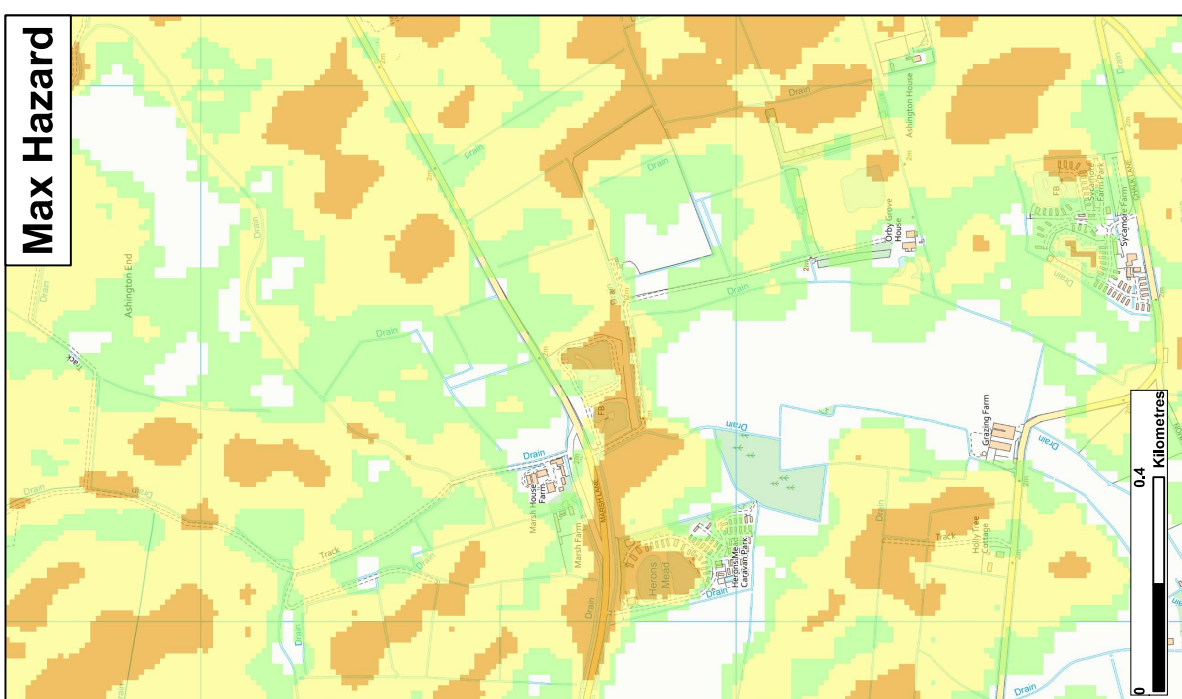
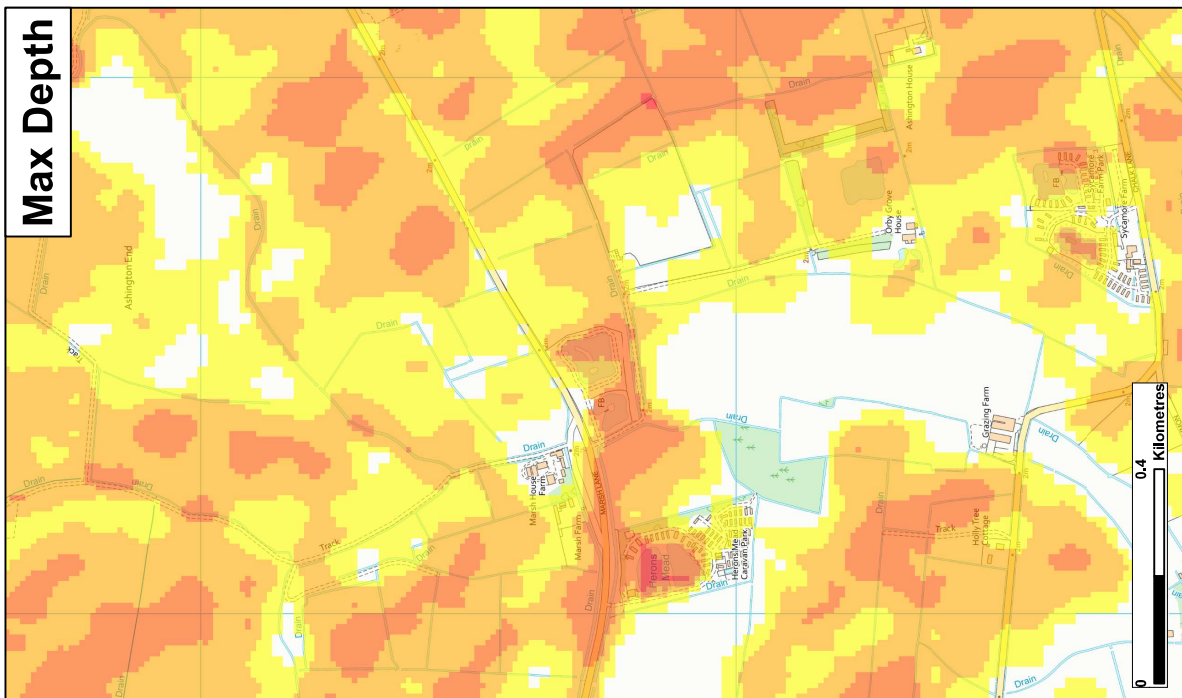
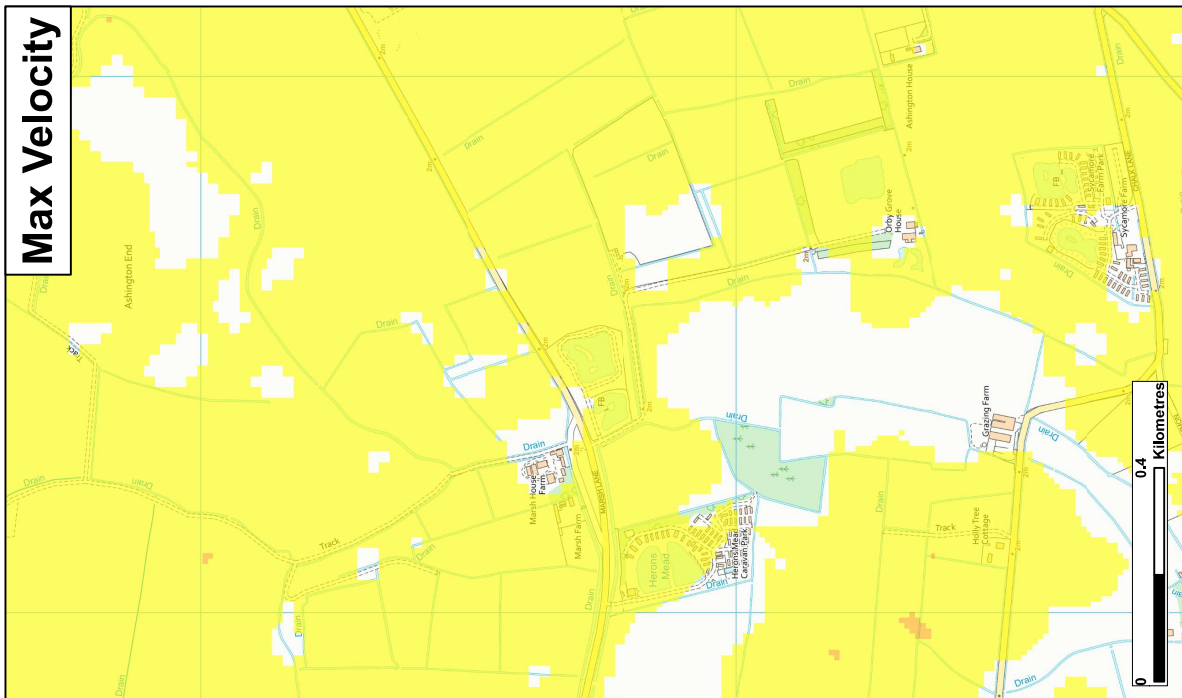
Produced by the Partnership and Strategic Overview Team, Lincoln


General Enquiries No: 03708 506 506

**Northern Area Tidal Hazard Mapping**

**Location of Modelled Breaches**

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**Lincolnshire and Northamptonshire  
Breach Hazard Mapping**

Map Centred on TF 51482 67265

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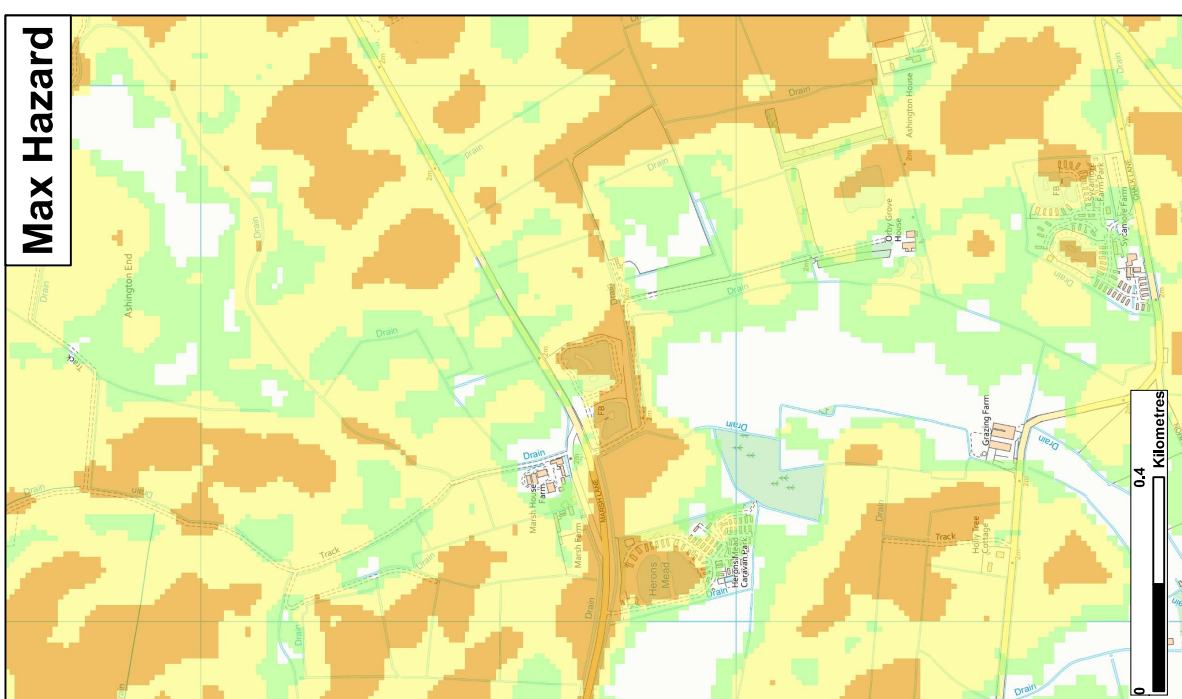
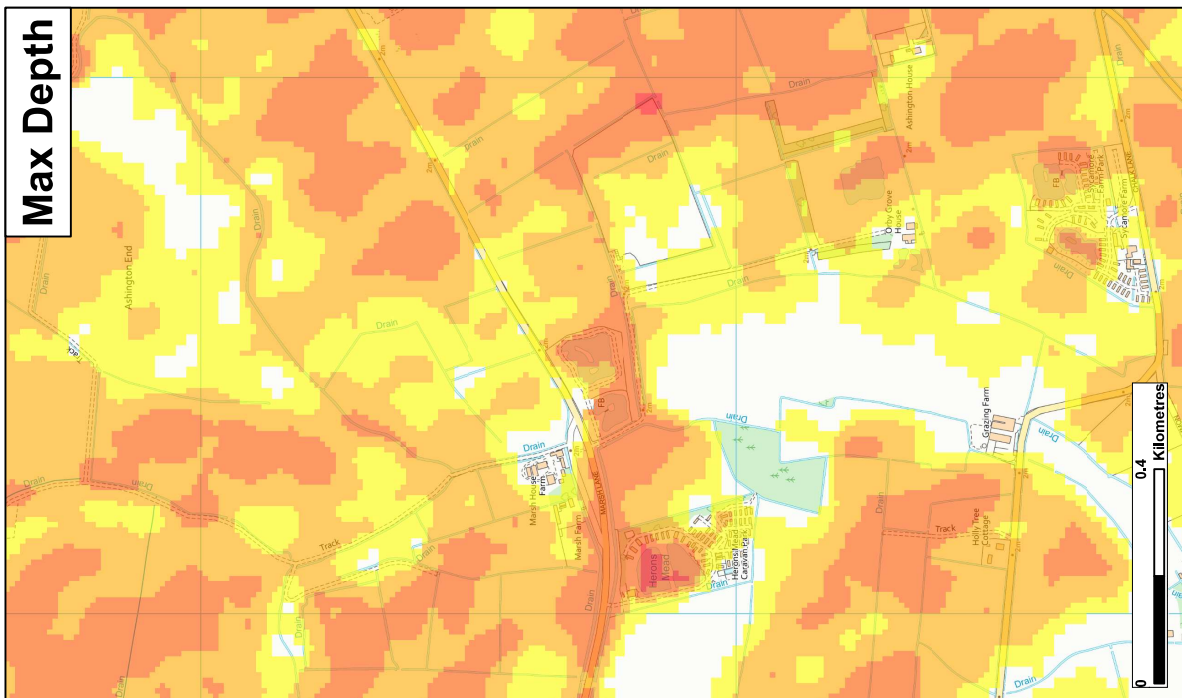
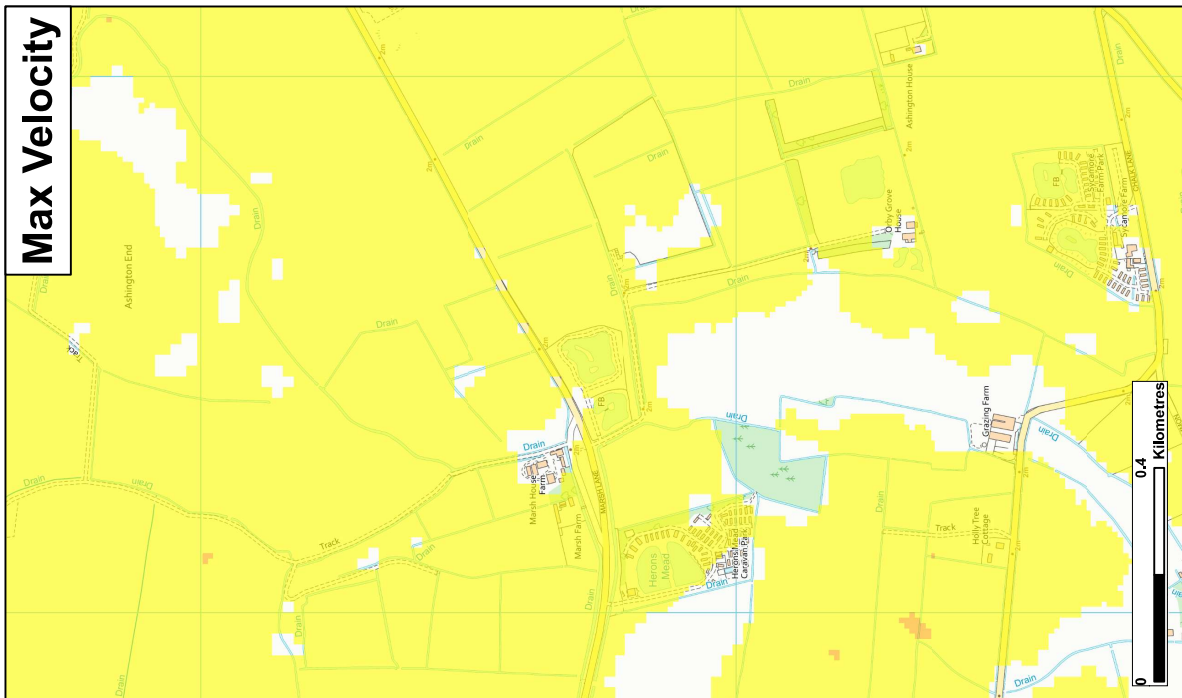
This map shows the level of flood hazard to people (called a hazard rating) if our flood defences are breached at certain locations, for a range of scenarios. The hazard rating depends on the depth and velocity of floodwater, and maximum values of these are also mapped.


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General Enquiries No: 03708 506 506. Weekday Daytime calls cost 5p plus up to 6p per minute from BT Weekend Unlimited. Mobile and other providers' charges may vary.

★ Modelled Breach Locations - see also the accompanying plan "Location of Modelled Breaches"		Scenario year	CCN	CCN-2023-
<b>Max Hazard</b> (Flood Risk to People: FD2320)	<b>Max Depth (m)</b>	2006	0.5% (1 in 200)	321478
<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #90EE90; border: 1px solid black; margin-right: 5px;"></span> Less than 0.75 (Low Hazard)</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFF00; border: 1px solid black; margin-right: 5px;"></span> Between 0.75 and 1.25 (Danger for Some)</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFA500; border: 1px solid black; margin-right: 5px;"></span> Between 1.25 and 2.0 (Danger for Most)</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FF0000; border: 1px solid black; margin-right: 5px;"></span> Greater than 2.0 (Danger for All)</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFF00; border: 1px solid black; margin-right: 5px;"></span> 0 - 0.25</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFA500; border: 1px solid black; margin-right: 5px;"></span> 0.25 - 0.50</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FF4500; border: 1px solid black; margin-right: 5px;"></span> 0.50 - 1.0</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FF0000; border: 1px solid black; margin-right: 5px;"></span> 1.0 - 1.6</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #800000; border: 1px solid black; margin-right: 5px;"></span> 1.6 +</li> </ul>	2023	0.5%	CCN
	<b>Max Velocity (m/s)</b>			Number
	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFF00; border: 1px solid black; margin-right: 5px;"></span> 0 - 0.3</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFA500; border: 1px solid black; margin-right: 5px;"></span> 0.3 - 1.0</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FF4500; border: 1px solid black; margin-right: 5px;"></span> 1.0 - 1.5</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FF0000; border: 1px solid black; margin-right: 5px;"></span> 1.5 - 2.5</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #800000; border: 1px solid black; margin-right: 5px;"></span> 2.5 +</li> </ul>			





**Lincolnshire and Northamptonshire  
Breach Hazard Mapping**

Map Centred on TF 51482 67265

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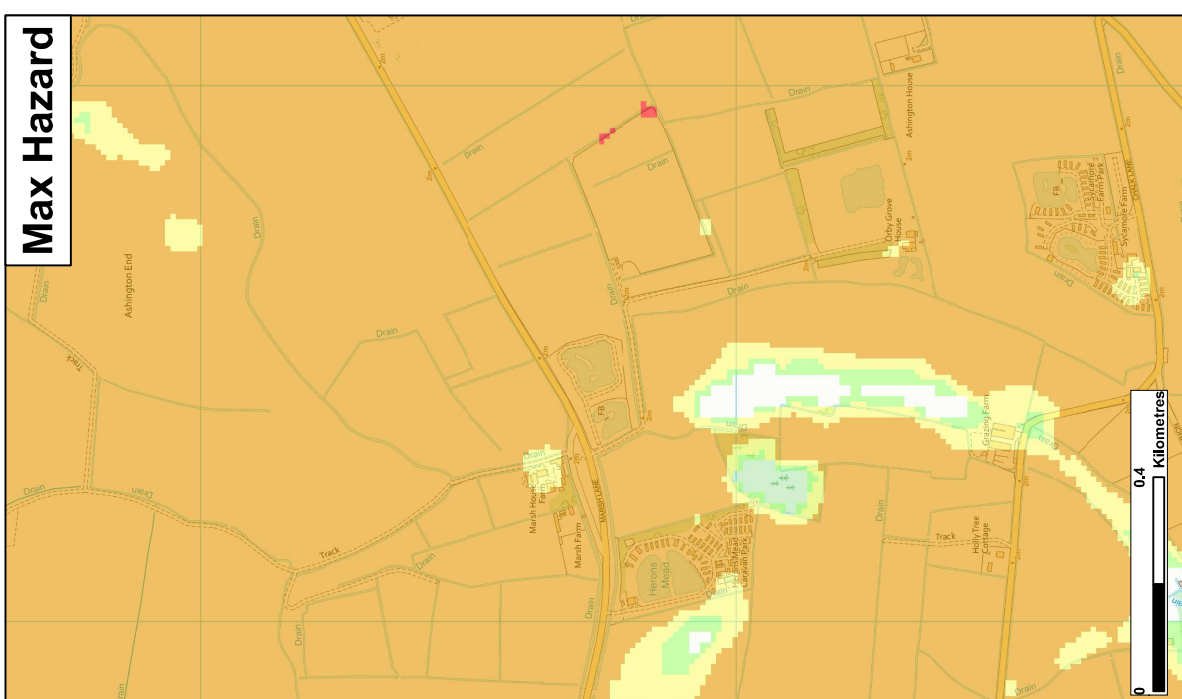
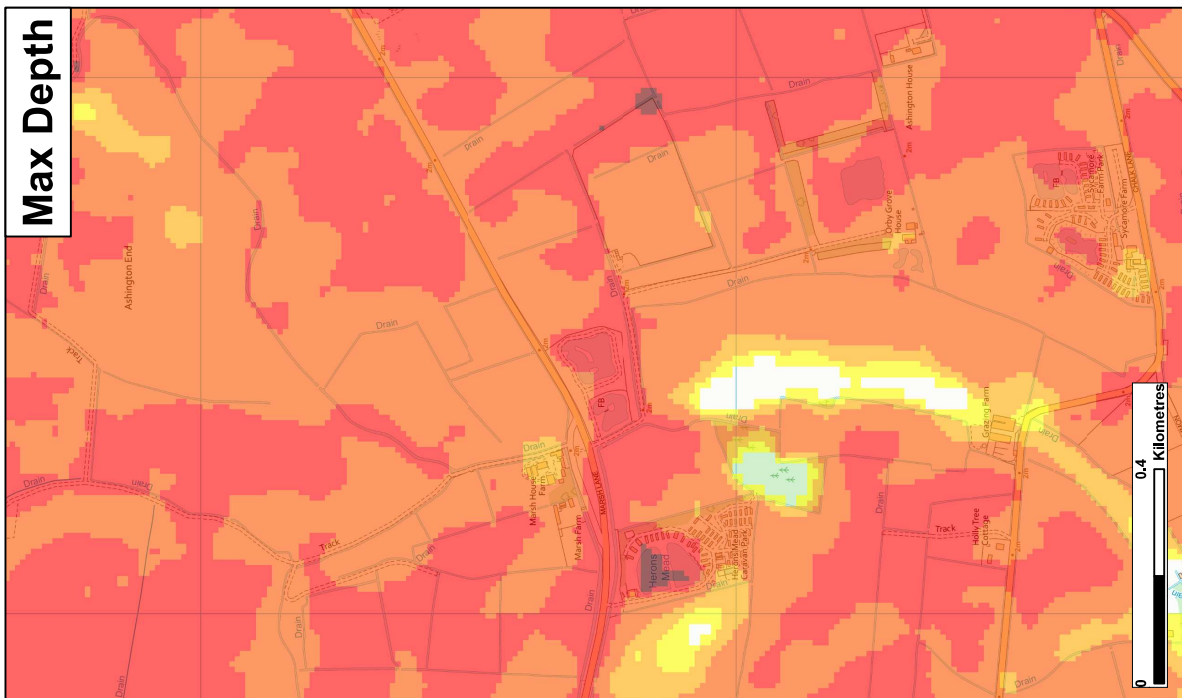
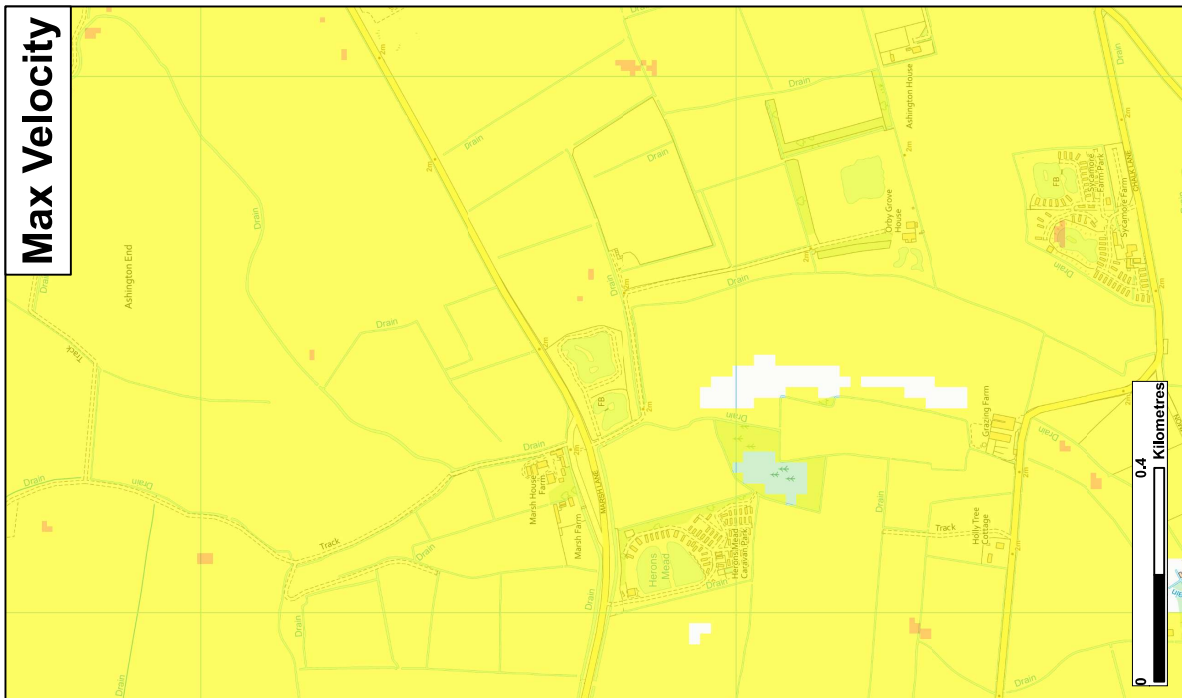
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★ Modelled Breach Locations - see also the accompanying plan "Location of Modelled Breaches"		Max Velocity (m/s)	CCN-2023-321478		
<b>Max Hazard</b> <small>(Flood Risk to People: FD2320)</small>	<b>Max Depth (m)</b>	<b>Max Velocity (m/s)</b>			
<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #90EE90; border: 1px solid black; margin-right: 5px;"></span> Less than 0.75 (Low Hazard)</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFF00; border: 1px solid black; margin-right: 5px;"></span> Between 0.75 and 1.25 (Danger for Some)</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFA500; border: 1px solid black; margin-right: 5px;"></span> Between 1.25 and 2.0 (Danger for Most)</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FF0000; border: 1px solid black; margin-right: 5px;"></span> Greater than 2.0 (Danger for All)</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFF00; border: 1px solid black; margin-right: 5px;"></span> 0 - 0.25</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFA500; border: 1px solid black; margin-right: 5px;"></span> 0.25 - 0.50</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FF4500; border: 1px solid black; margin-right: 5px;"></span> 0.50 - 1.0</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FF0000; border: 1px solid black; margin-right: 5px;"></span> 1.0 - 1.6</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #800000; border: 1px solid black; margin-right: 5px;"></span> 1.6 +</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFF00; border: 1px solid black; margin-right: 5px;"></span> 0 - 0.3</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFA500; border: 1px solid black; margin-right: 5px;"></span> 0.3 - 1.0</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FF4500; border: 1px solid black; margin-right: 5px;"></span> 1.0 - 1.5</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FF0000; border: 1px solid black; margin-right: 5px;"></span> 1.5 - 2.5</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #800000; border: 1px solid black; margin-right: 5px;"></span> 2.5 +</li> </ul>	<ul style="list-style-type: none"> <li><b>2006</b></li> <li><b>Scenario year</b></li> <li><b>August 2023</b></li> <li><b>Date Printed</b></li> </ul>	<ul style="list-style-type: none"> <li><b>0.1%</b></li> <li><b>Annual Chance (1 in 1000)</b></li> <li><b>CCN Number</b></li> </ul>	<ul style="list-style-type: none"> <li><b>2006</b></li> <li><b>Scenario year</b></li> </ul>



**Environment Agency**

**Lincolnshire and Northamptonshire Breach Hazard Mapping**

Map Centred on TF 51482 67265

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This map shows the level of flood hazard to people (called a hazard rating) if our flood defences are breached at certain locations, for a range of scenarios. The hazard rating depends on the depth and velocity of floodwater, and maximum values of these are also mapped.

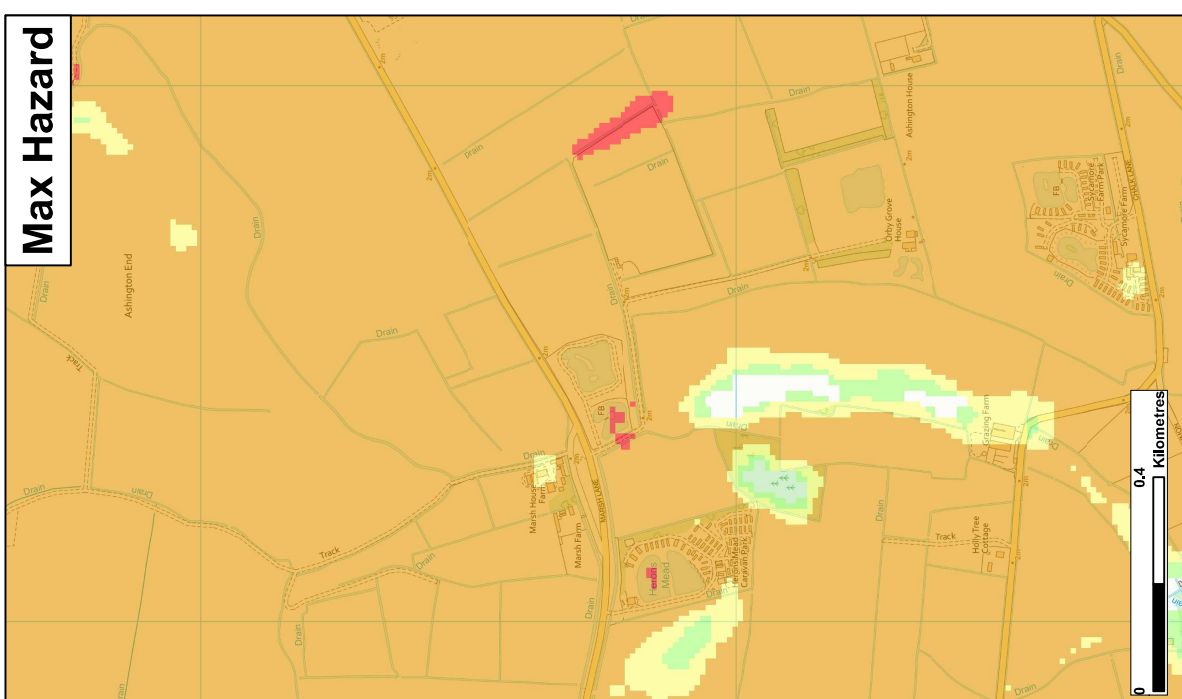
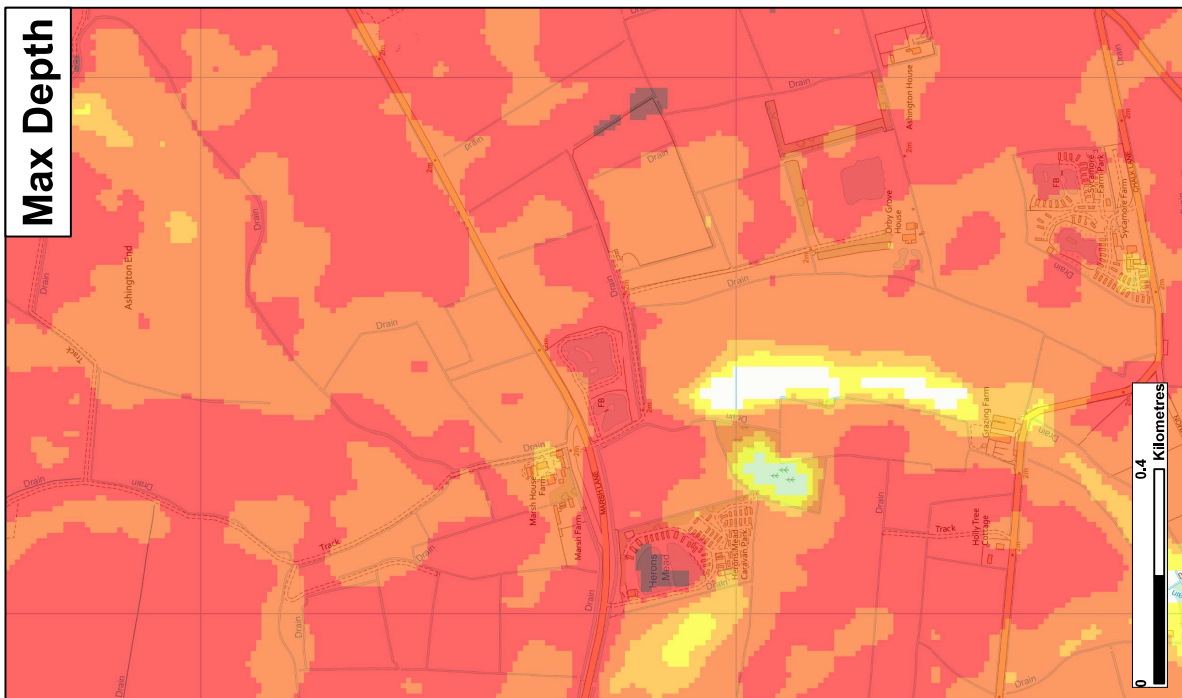
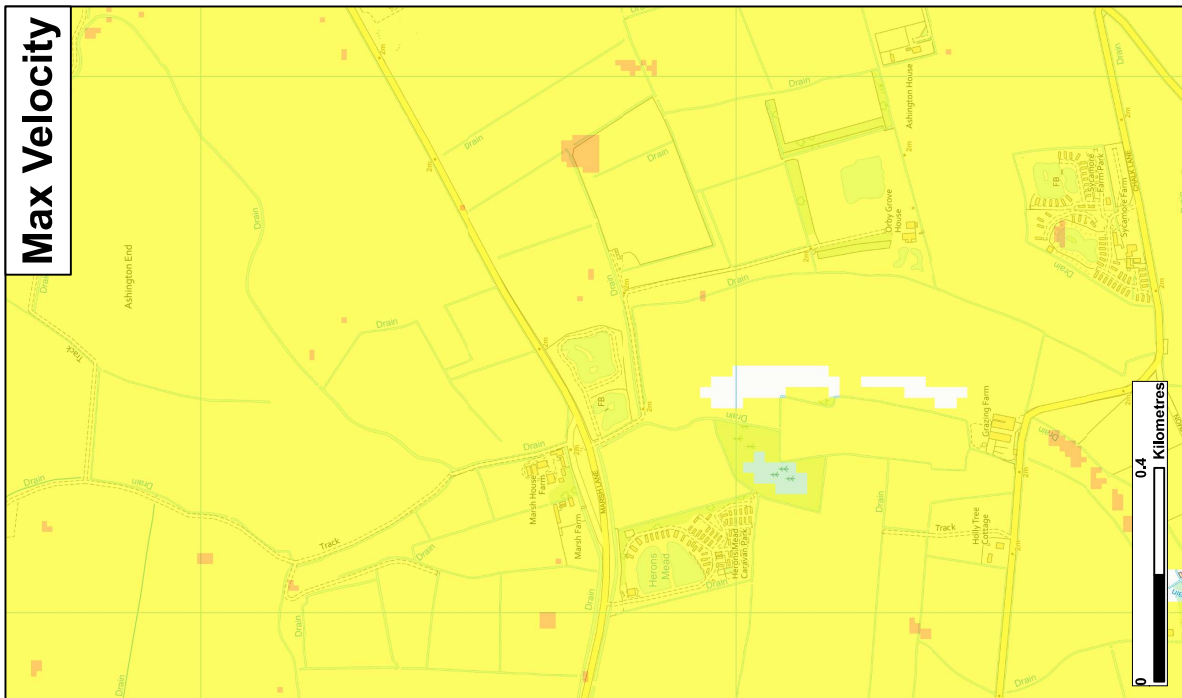
The map is based on computer modelling of simulated breaches at specific locations. Each breach has been modelled individually and the results combined to create this map. Multiple breaches, other combinations of breaches, different sized tidal surges or flood flows may all give different results.

The map only considers the consequences of a breach, it does not make any assumption about the likelihood of a breach occurring. The likelihood of a breach occurring will depend on a number of different factors, including the construction and condition of the defences in the area. A breach is less likely where defences are of a good standard, but a risk of breaching remains.

General Enquiries No: 03708 506 506. Weekday Daytime calls cost 5p plus up to 6p per minute from BT Weekend Unlimited. Mobile and other providers' charges may vary.

★ Modelled Breach Locations - see also the accompanying plan "Location of Modelled Breaches"		Max Velocity (m/s)		CCN-2023-321478		
<b>Max Hazard</b> (Flood Risk to People: FD2320) Less than 0.75 (Low Hazard) Between 0.75 and 1.25 (Danger for Some) Between 1.25 and 2.0 (Danger for Most) Greater than 2.0 (Danger for All)	<b>Max Depth (m)</b> 0 - 0.25 0.25 - 0.50 0.50 - 1.0 1.0 - 1.6 1.6 +	<b>Max Velocity (m/s)</b> 0 - 0.3 0.3 - 1.0 1.0 - 1.5 1.5 - 2.5 2.5 +	CCN		CCN	
			Scenario		0.5%	CCN Number
			Annual Chance		(1 in 200)	2115
			Scenario year		August 2023	2115
			Date Printed		August 2023	2115





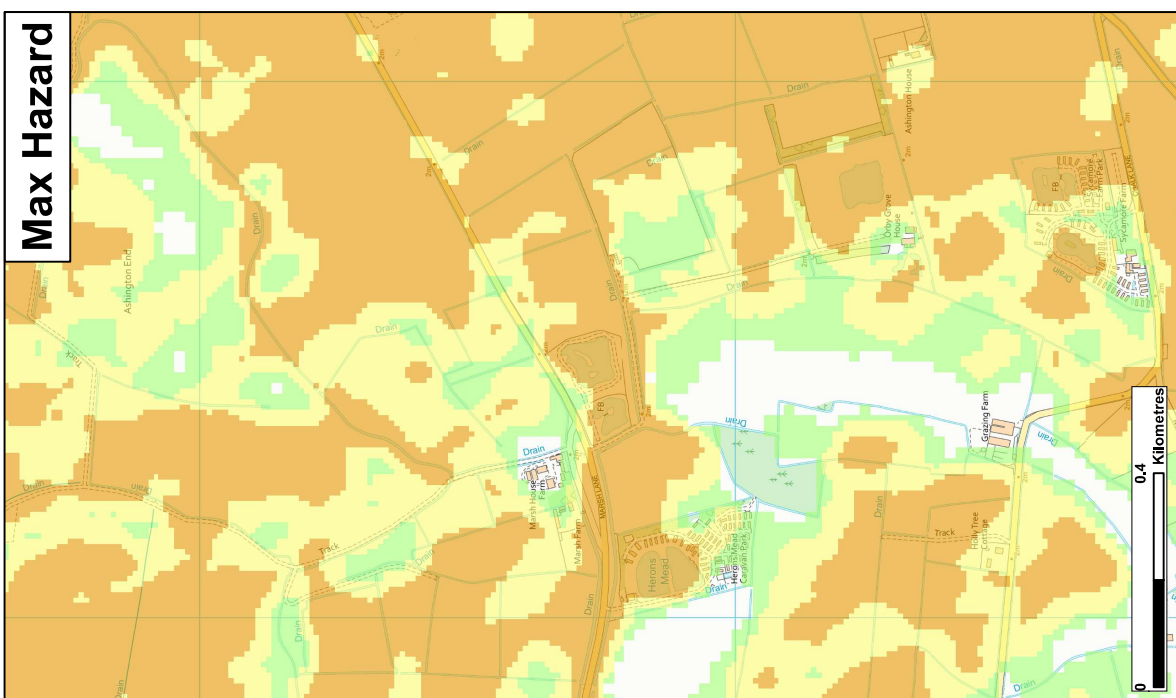
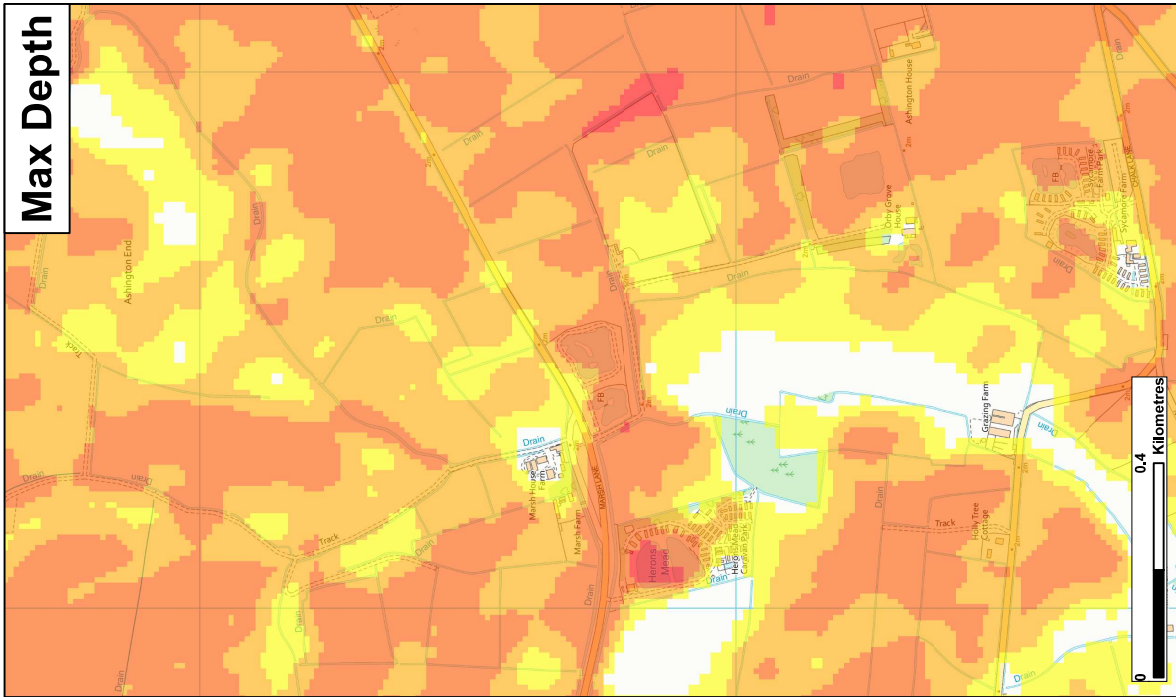
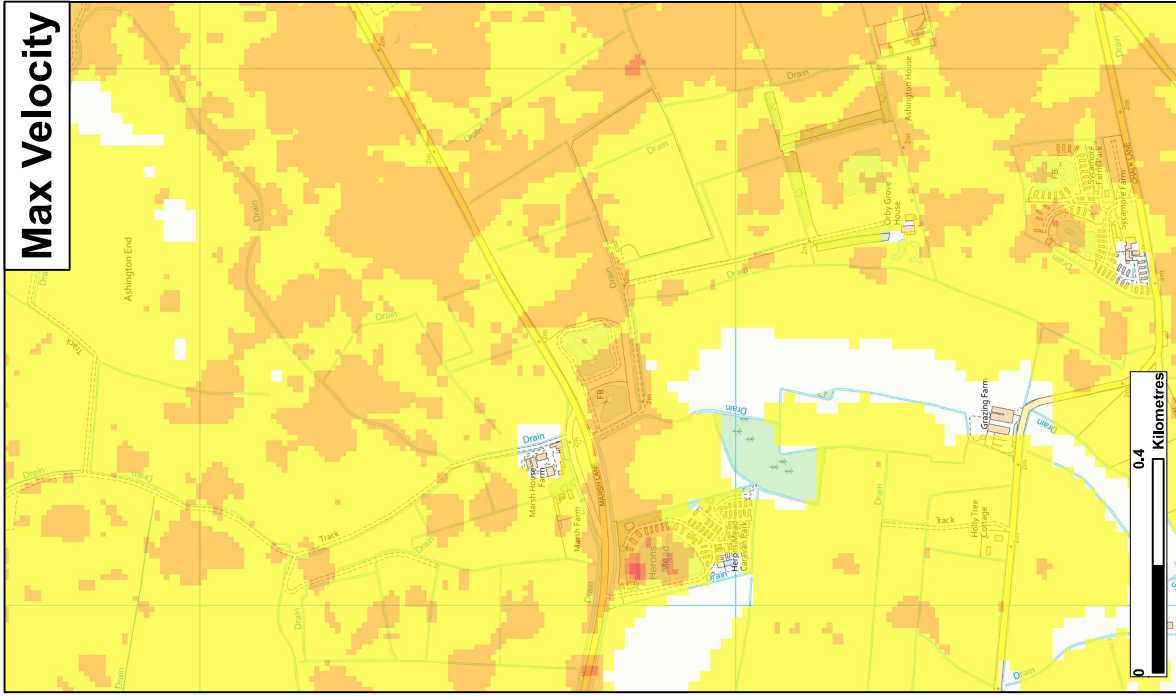
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★ Modelled Breach Locations - see also the accompanying plan "Location of Modelled Breaches"		Max Velocity (m/s)	CCN-2023-321478
<b>Max Hazard</b> (Flood Risk to People: FD2320) Less than 0.75 (Low Hazard) Between 0.75 and 1.25 (Danger for Some) Between 1.25 and 2.0 (Danger for Most) Greater than 2.0 (Danger for All)	<b>Max Depth (m)</b> 0 - 0.25 0.25 - 0.50 0.50 - 1.0 1.0 - 1.6 1.6 +	0 - 0.3	<b>Scenario</b> 2115 <b>Annual Chance</b> 0.1% (1 in 1000)
		0.3 - 1.0	
		1.0 - 1.5	
		1.5 - 2.5	
		2.5 +	
<b>Date Printed</b> August 2023	<b>CCN Number</b> CCN	<b>CCN</b> CCN	<b>CCN</b> CCN



**Environment Agency**

**Lincolnshire and Northamptonshire Overtopping Hazard Mapping**

Map Centred on TF 51482 67265

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The map is based on computer modelling of simulated overtopping of the main coastal defences for specific tidal scenarios. It does not include overtopping along the following tidal rivers which are currently being investigated: Witham Haven (upstream of Hobhole), and Welland (upstream of Fosdyke Bridge)

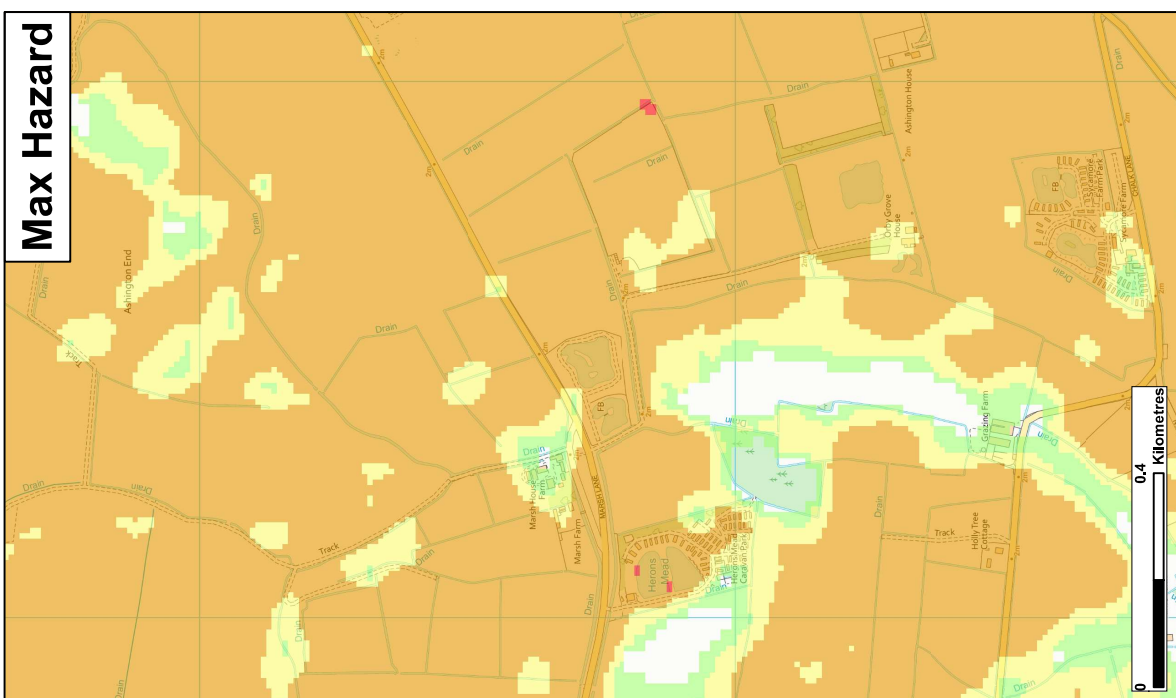
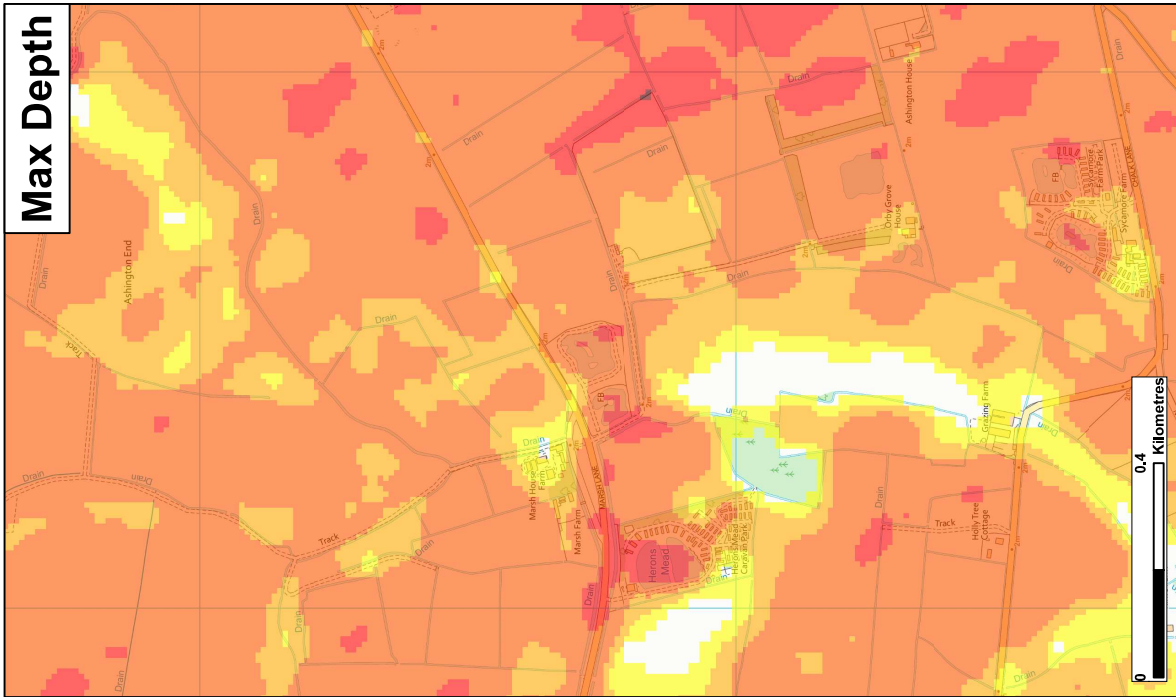
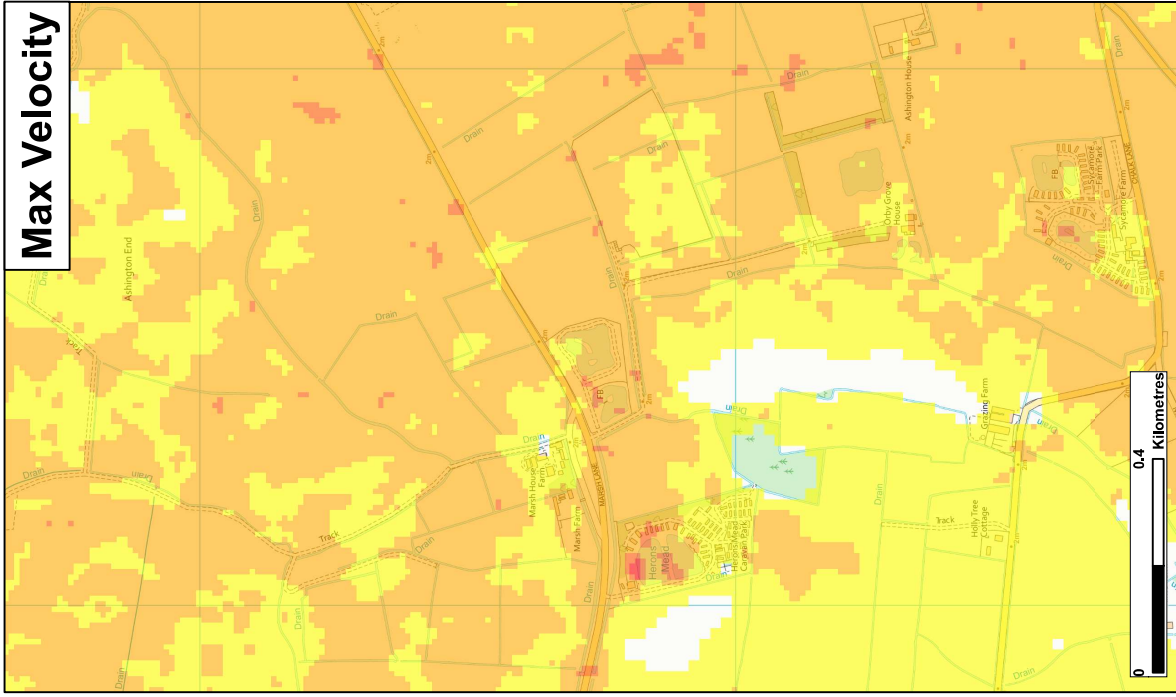
The map only considers the consequences of overtopping of the defences, and does not show the possible consequences of breaches of the tidal defences. Separate maps of the flood extent from just breaching of the defences are available.

For future climate change scenarios it is assumed that defences remain at 2006 heights.

These maps do not replace the flood zone maps used in the National Planning Policy Framework (NPPF)

Date Printed	Scenario year	Scenario Annual Chance	CCN Number	CCN
August 2023	2115	0.5% (1 in 200)	321478	CCN-2023-321478

Max Hazard	Max Depth (m)	Max Velocity (m/s)
(Flood Risk to People : FD320) Less than 0.75 (Low Hazard)	0 - 0.25	0 - 0.3
Between 0.75 and 1.25 (Danger for Some)	0.25 - 0.50	0.3 - 1.0
Between 1.25 and 2.0 (Danger for Most)	0.50 - 1.0	1.0 - 1.5
Greater than 2.0 (Danger for All)	1.0 - 1.6	1.5 - 2.5
	1.6 +	2.5 +



**Lincolnshire and Northamptonshire  
Overtopping Hazard Mapping**

Map Centred on TF 51482 67265

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The map is based on computer modelling of simulated overtopping of the main coastal defences for specific tidal scenarios. It does not include overtopping along the following tidal rivers which are currently being investigated: Witham Haven (upstream of Hobhole), and Welland (upstream of Fosdyke Bridge)

The map only considers the consequences of overtopping of the defences, and does not show the possible consequences of breaches of the tidal defences. Separate maps of the flood extent from just breaching of the defences are available.

For future climate change scenarios it is assumed that defences remain at 2006 heights.

These maps do not replace the flood zone maps used in the National Planning Policy Framework (NPPF)

Date Printed	Scenario year	Scenario Annual Chance	CCN Number	CCN-2023-321478
August 2023	2115	0.1% (1 in 1000)	CCN	CCN-2023-321478

Max Depth (m)	Max Velocity (m/s)
<div style="width: 48%;"> <p>0 - 0.25</p> <p>0.25 - 0.50</p> <p>0.50 - 1.0</p> <p>1.0 - 1.6</p> <p>1.6 +</p> </div> <div style="width: 48%;"> <p>0 - 0.3</p> <p>0.3 - 1.0</p> <p>1.0 - 1.5</p> <p>1.5 - 2.5</p> <p>2.5 +</p> </div>	

Max Hazard	Max Velocity (m/s)
<div style="width: 48%;"> <p>(Flood Risk to People : FD320)</p> <p>Less than 0.75 (Low Hazard)</p> <p>Between 0.75 and 1.25 (Danger for Some)</p> <p>Between 1.25 and 2.0 (Danger for Most)</p> <p>Greater than 2.0 (Danger for All)</p> </div> <div style="width: 48%;"> <p>0 - 0.3</p> <p>0.3 - 1.0</p> <p>1.0 - 1.5</p> <p>1.5 - 2.5</p> <p>2.5 +</p> </div>	