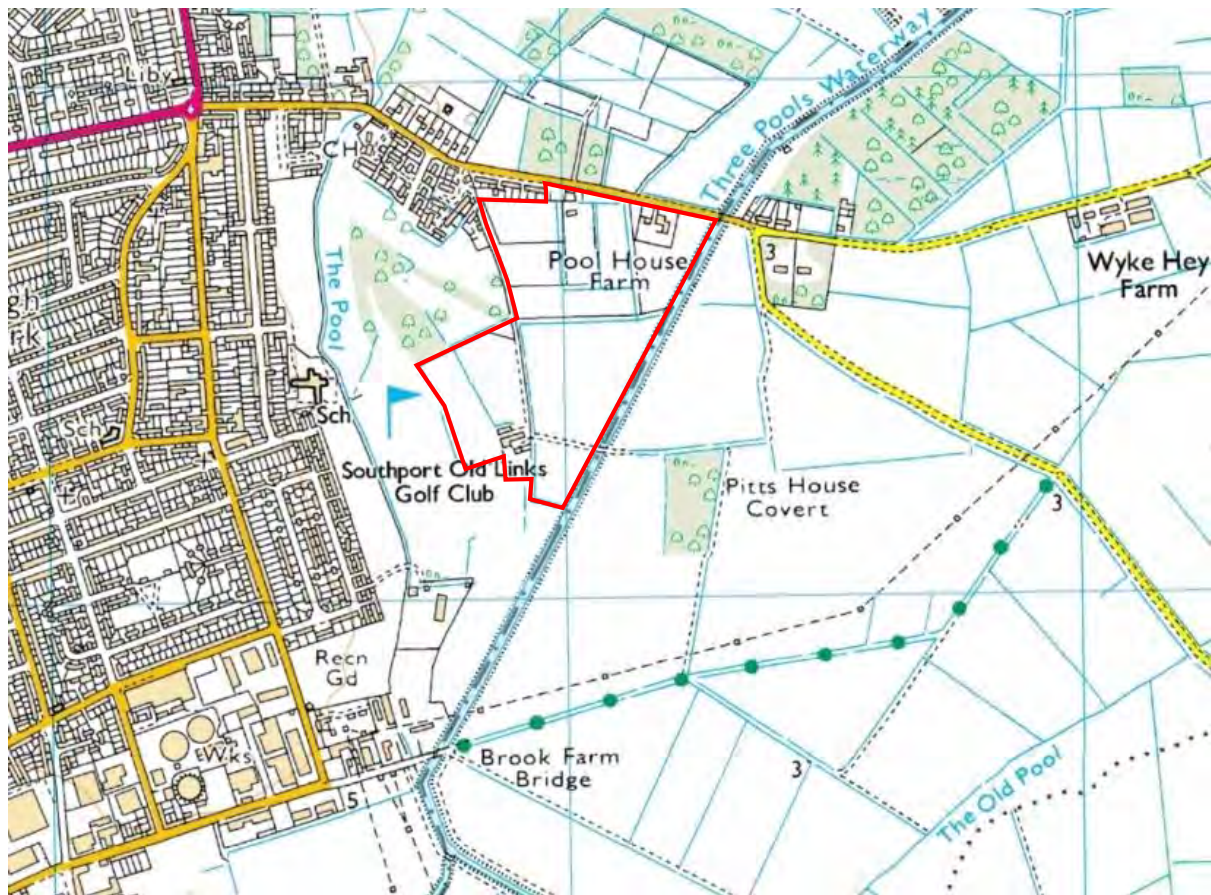


APPENDIX A: LOCATION PLAN

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LOCATION PLAN

LAND ADJACENT TO MOSS LANE, SOUTHPORT



OS X (Eastings)	337053
OS Y (Northings)	417558
Nearest Post Code	PR9 7QT
Lat (WGS84)	N53:39:03 (53.650717)
Long (WGS84)	W2:57:14 (-2.953802)
Lat, Long	53.650717, -2.953802
Nat Grid	SD370175 / SD3705317558
mX	-328815
mY	7069842
Mapcode	GBR 7VT7.91

APPENDIX B: TOPOGRAPHIC SURVEY

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PLAN
SECTION
ELEVATION
PROFILES
GENERAL NOTES
1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES
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10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES



Southport Old Links
(Golf Course)

APPENDIX C: EA INFORMATION & CORRESPONDENCE

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Kirsty Williams

From: CMBLNC Info Requests <Inforequests.cmblnc@environment-agency.gov.uk>
Sent: 06 October 2015 11:13
To: Kirsty Williams
Subject: RE: CL4775HR

Hi Kirsty

Sorry for the delay in getting back to you regarding this. Our Flood Risk Management Team have confirmed that they are happy with your outlined approach.

Many thanks.

Helen Reynolds
Customers and Engagement Officer
Cumbria and Lancashire
Environment Agency
Ghyll Mount, Gillan Way, Penrith 40 Business Park, Penrith, Cumbria, CA11 9BP
Telephone: 01768 215848
Email: Inforequests.cmblnc@environment-agency.gov.uk

I would be very grateful if you could take a couple of minutes to fill in the survey below about our service. This will help us to improve our service in the future.

<http://www.smartsurvey.co.uk/s/EnvironmentAgencyCustomerSurvey/?a=CL>

From: Kirsty Williams [mailto:kirstywilliams@betts-associates.co.uk]
Sent: 17 September 2015 09:15
To: CMBLNC Info Requests
Subject: RE: CL4775HR

Good Morning Helen,

Many thanks for sending through the water levels data for the above site. Following discussions we understand that the site has been sequentially tested (passed) and allocated for residential use and we are now looking at the best way forward within the FRA to address the potential flood risks within site, we would greatly appreciate your guidance with this matter. Following receipt of a topographical survey we have reviewed the water levels information with the existing ground levels and produced illustrative plans showing the extents of the floodplain during the defended and undefended scenarios. From the mapping information you sent through we are aware the site would potentially be at risk during the defended and undefended fluvial scenarios and at potential risk during the undefended tidal scenario (I have attached the mapping information for completeness).

- From a mitigation perspective, due to the residential nature of the proposals the strategy for development is to minimise development within Flood Zone 3 (defended fluvial scenario); furthermore minimum finished floor levels onsite will be required to secure the development, such would typically be 600mm above the TWL during the design event (Q100+CCA). Can you confirm whether in light of the existing defences and the level of protection, mitigation (FFLs) should be based on the fluvial defended scenario water levels onsite (IE min. 600mm above the TWL during the Q100+CCA event). We appreciate that the residual impact of potential flooding during the undefended scenario will be require to be reviewed within the FRA, including the tidal events identified in the EA mapping data.
- The development site is considered to benefit for existing flood defences, the EA data indicates during the defended tidal scenario the site would have no onsite inundation. Therefore the development strategy for

the site is to minimise residential development within the areas identified as Flood Zone 3 during the defended fluvial scenario (illustrated in drawing no. 107). In light of the potential extents of FZ 3 illustrated in the drawing (no.107) some levels raising may be required to provide acceptable mitigation; in light of the site benefiting from existing defences we would like confirmation that any compensatory floodplain storage required, due to potential raising of levels within FZ 3, should be based on the defended fluvial scenario (opposed to the undefended scenarios).

I trust the above information is satisfactory however if you wish to discuss further or require additional information form me please do not hesitate to contact me on the details below.

Kind Regards

Kirsty Williams

Graduate Flood Risk Analyst

Betts Associates Ltd

Old Marsh Farm Barns, Welsh Road, Sealand, Flintshire, CH5 2LY

T - 01244 288178

kirstywilliams@betts-associates.co.uk

www.betts-associates.co.uk

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FLOOD RISK MANAGEMENT | STRUCTURAL SURVEYS | PARTY WALL DUTIES | ECOLOGY

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From: CMBLNC Info Requests [<mailto:Inforequests.cmblnc@environment-agency.gov.uk>]

Sent: 11 September 2015 11:50

To: Kirsty Williams <kirstywilliams@betts-associates.co.uk>

Subject: CL4775HR

Dear Kirsty

Enquiry regarding land at Moss Lane, Southport, PR9 7QT

Thank you for your enquiry which was received on 2 September 2015.

We respond to requests under the Freedom of Information Act 2000 and Environmental Information Regulations 2004.

Please find attached the product 4 data for this site.

Please get in touch if you have any further queries or contact us within two months if you'd like us to review the information we have sent.

Kind regards

Helen

Helen Reynolds

Customers and Engagement Officer
Cumbria and Lancashire
Environment Agency
Ghyll Mount, Gillan Way, Penrith 40 Business Park, Penrith, Cumbria, CA11 9BP
Telephone: 01768 215848
Email: Inforequests.cmlnc@environment-agency.gov.uk

I would be very grateful if you could take a couple of minutes to fill in the survey below about our service. This will help us to improve our service in the future.

<http://www.smartsurvey.co.uk/s/EnvironmentAgencyCustomerSurvey/>

From: CMBLNC Info Requests
Sent: 02 September 2015 16:17
To: Kirsty Williams
Subject: CL4775HR

Dear Kirsty

Thank you for contacting the Environment Agency.

The Freedom of Information Act and Environmental Information Regulations state that a public authority must respond to requests for information within 20 working days however we always aim to provide an answer as soon as we can.

For further information on what you can expect from us and our full service commitment to you then please visit our website:

<http://www.environment-agency.gov.uk/aboutus/149626.aspx>

Usually we make no charge for providing information. In some cases we may make a charge for licensed re-use of our data. Where this is the case, we will notify you in advance.

Environmental Incident

If your email was to report an environmental incident i.e. pollution, fish in distress, dumping of hazardous waste etc then please call our **freephone 24 hour Incident Hotline** on **0800 80 70 60**.

For more details about incident reporting please see our website: <https://www.gov.uk/report-an-environmental-incident>

If you need to contact me in the meantime, please do not hesitate to do so using the details below and quoting reference number CL4775HR.

Kind regards

Helen

Helen Reynolds
Customers and Engagement Officer
Cumbria and Lancashire
Environment Agency
Ghyll Mount, Gillan Way, Penrith 40 Business Park, Penrith, Cumbria, CA11 9BP
Telephone: 01768 215848
Email: Inforequests.cmlnc@environment-agency.gov.uk

I would be very grateful if you could take a couple of minutes to fill in the survey below about our service. This will help us to improve our service in the future.

<http://www.smartsurvey.co.uk/s/EnvironmentAgencyCustomerSurvey/>

From: Kirsty Williams [<mailto:kirstywilliams@betts-associates.co.uk>]
Sent: 02 September 2015 16:03
To: CMBLNC Info Requests
Subject: FRA: MOSS LANE, SOUTHPORT

To whom it may concern,

LAND AT MOSS LANE, SOUTHPORT, PR9 7QT

Please could you confirm whether you have any information that you feel would be valuable to a Flood Risk Assessment for the above site (location plan attached), including details of historical flooding; this would be greatly appreciated.

Please do not hesitate to contact me on the details below to discuss further should you require additional information or clarification.

Kind Regards

Kirsty Williams
Graduate Flood Risk Analyst

Betts Associates Ltd
Old Marsh Farm Barns, Welsh Road, Sealand, Flintshire, CH5 2LY
T - 01244 288178

kirstywilliams@betts-associates.co.uk
www.betts-associates.co.uk

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We have checked this email and its attachments for viruses. But you should still check any attachment before opening it.

We may have to make this message and any reply to it public if asked to under the Freedom of Information Act, Data Protection Act or for litigation. Email messages and attachments sent to or from any Environment Agency address may also be accessed by

Fluvial Flood Level Map: Moss Lane, Southport

Produced: 10 September 2015
Our Ref: CL4475
NGR: SD 37053 17558

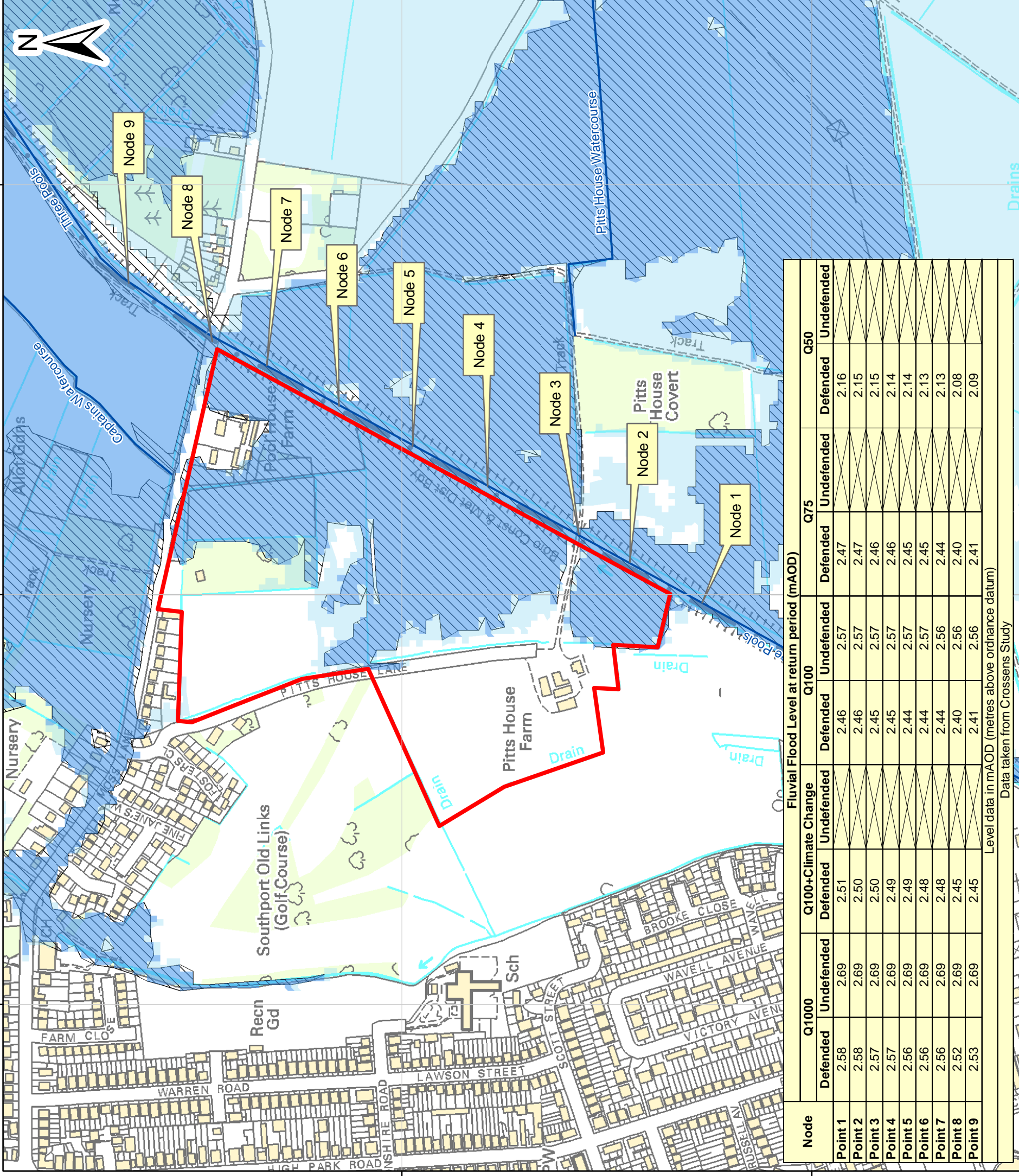


Flood Zone 3 shows the area that could be affected by flooding:

- from the sea with a 1 in 200 or greater chance of happening each year
- or from a river with a 1 in 100 or greater chance of happening each year.

Flood Zone 2 shows the extent of an extreme flood from rivers or the sea with up to a 1 in 1000 chance of occurring each year.

ABDs (Areas Benefitting from Defences) show the area benefiting from defences during a 1 in 200 tidal, or 1 in 100 fluvial flood event.



Node	Q1000		Q100+Climate Change		Q100		Q75		Q50	
	Defended	Undefended	Defended	Undefended	Defended	Undefended	Defended	Undefended	Defended	Undefended
Point 1	2.58	2.69	2.51	2.57	2.46	2.57	2.47	2.16	2.16	2.16
Point 2	2.58	2.69	2.50	2.57	2.46	2.57	2.47	2.15	2.15	2.15
Point 3	2.57	2.69	2.50	2.57	2.45	2.57	2.46	2.15	2.15	2.15
Point 4	2.57	2.69	2.49	2.57	2.45	2.57	2.46	2.14	2.14	2.14
Point 5	2.56	2.69	2.48	2.57	2.44	2.57	2.45	2.14	2.13	2.13
Point 6	2.56	2.69	2.48	2.56	2.44	2.56	2.44	2.13	2.13	2.13
Point 7	2.56	2.69	2.45	2.56	2.40	2.56	2.40	2.08	2.08	2.08
Point 8	2.52	2.69	2.45	2.56	2.41	2.56	2.41	2.09	2.09	2.09
Point 9	2.53	2.69	2.45	2.56	2.41	2.56	2.41	2.09	2.09	2.09

Level data in mAOD (metres above ordnance datum)
Data taken from Crossens Study

336500

337000

337500

Tidal Flood Level Map: Moss Lane, Southport

Produced: 10 September 2015
Our Ref: CL4475
NGR: SD 37053 17558

Key

T200+CC (Un defended)

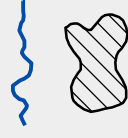
mAOD



High : 5.71

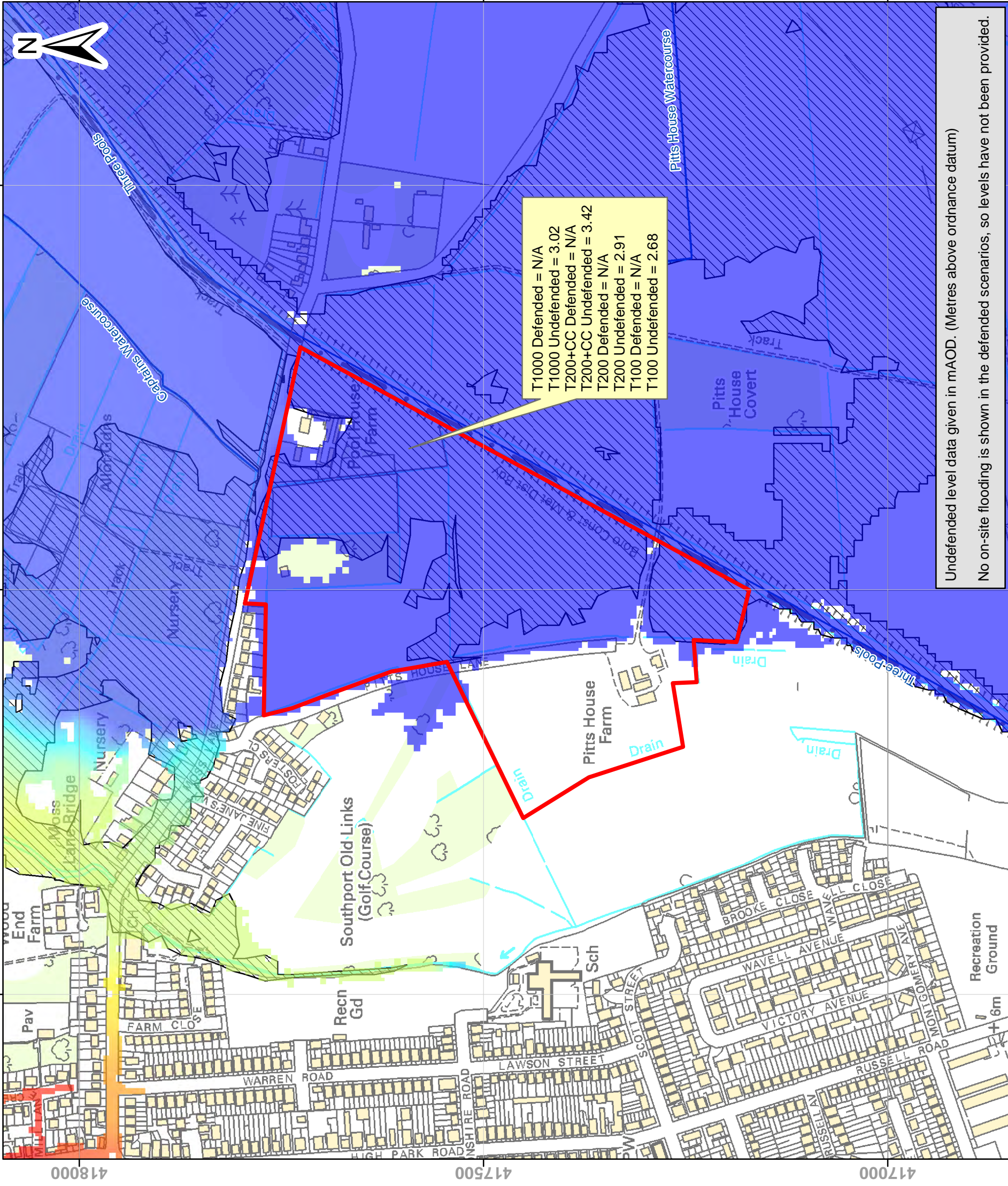
Low : 3.42

Main River



Areas Benefiting from Defences

ABDs (Areas Benefiting from Defences) show the area benefiting from defences during a 1 in 200 tidal, or 1 in 100 fluvial flood event.



Un defended level data given in mAOD. (Metres above ordnance datum)
No on-site flooding is shown in the defended scenarios, so levels have not been provided.

336500

337000

337500



Enter a postcode or place name:



Other topics for this area...

Flood Map for Planning (Rivers and Sea)

Map legend

Click on the map to see what Flood Zone (National Planning Policy Guidance definitions) the proposed development is in.

Flood Map for Planning (Rivers and Sea)

Flood Zone 3

Flood Zone 2

Flood defences (Not all may be shown*)

Areas benefiting from flood defences (Not all may be shown*)

Main River Line

Main River Line

Other national environmental organisations

Other national environmental organisations

Natural Resources Wales Area of responsibility

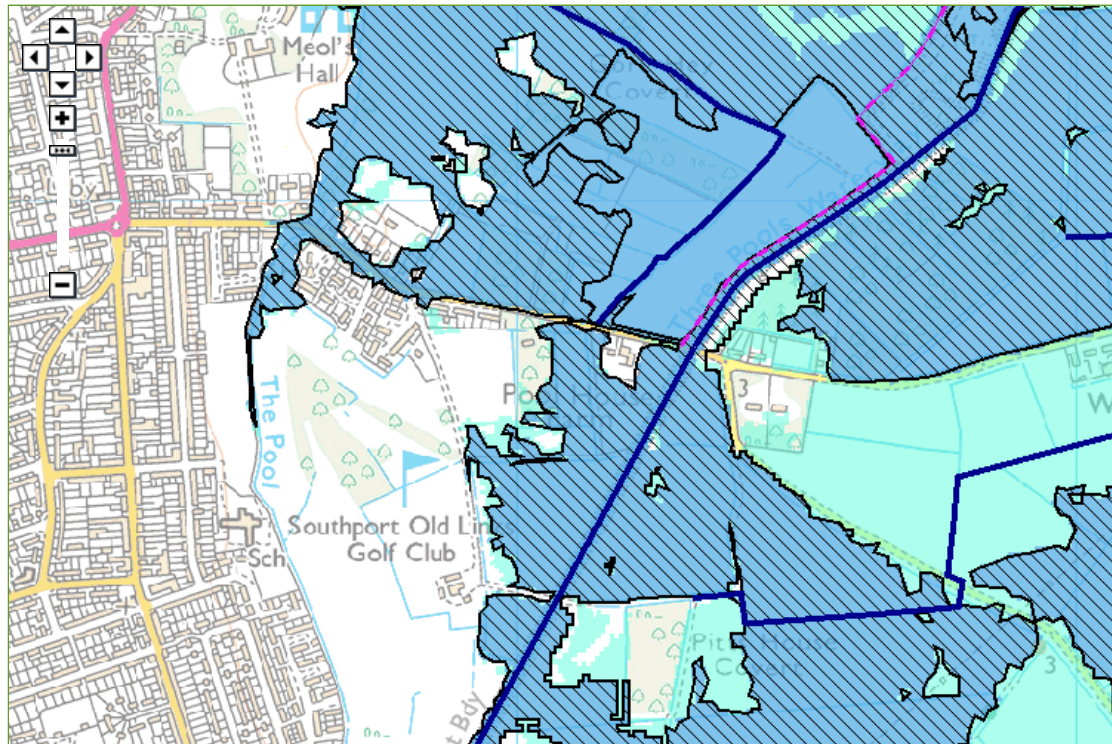
Scottish Environment Protection Agency Area of responsibility

X: 337,086;Y: 417,686 at scale 1:10,000

[Other maps](#)

[Data search](#)

[Text only version](#)



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More about flooding:

[Understanding the Flood Map for Planning \(Rivers and Sea\)](#)

A more detailed explanation to help you understand the flood map shown above.

[Current flood warnings](#)

We provide flood warnings online 24 hours a day. Find out the current flood warning status in your local area.

* **Legend Information:** Flood defences and the areas benefiting from them are gradually being added through updates. Please contact your local [environment agency office](#) for further details.

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Other topics for this area...



[View other Interactive Maps](#)

Risk of Flooding from Rivers and Sea

River flooding happens when a river cannot cope with the amount of water draining into it from the surrounding land. Sea flooding happens when there are high tides and stormy conditions.

The shading on the map shows the risk of flooding from rivers and the sea in this particular area.

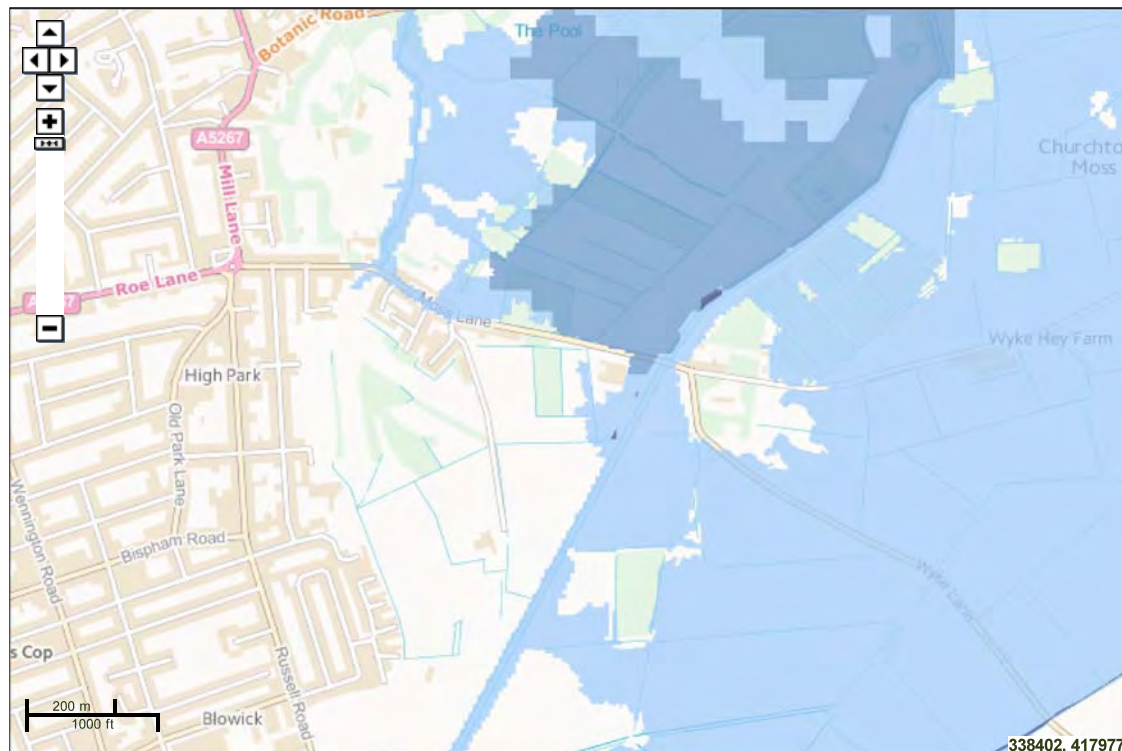
Click on the map for a more detailed explanation.

Map of X: 337,085; Y: 417,685 at scale 1:10,000

[Data search](#)

Map legend

- Risk of Flooding from Rivers and Sea
 - High
 - Medium
 - Low
 - Very Low
- Other national environmental organisations
 - Natural Resources Wales Area of responsibility
 - Scottish Environment Protection Agency Area of responsibility



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Interactive Maps

Risk of Flooding from Rivers and Sea for X:337188, Y:417609

The location you have selected is in an area that has a low chance of flooding from rivers or the sea.



What does 'low' mean?

Low means that each year, this area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%).

This takes into account the effect of any flood defences that may be in this area. Flood defences reduce, but do not completely stop the chance of flooding as they can be overtopped or fail.

Floods Destroy. Be prepared

It is important to remember that while the risk is low, we can never eliminate all flooding. Surrounding roads and services may still be affected and could impact you.

- [Check if you can receive free flood warnings](#)
- [Complete a flood plan](#)
- [Find out how to prepare your property for flooding](#)

Planning a development

This information is not suitable for use in land-use planning. If you are planning a development, you need to use the [Risk of Flooding for Land-Use Planning \(Rivers and Sea\) for England](#) or [Development Advisory Map for Wales](#). This is because for planning purposes you need to use information based on flooding without defences.

Further information

You can use the information in this area to see the approximate areas that would flood, and which parts would be shallower or deeper.

You can also check the [level and flow estimates for rivers and sea](#), and the [latest river and sea levels](#).

If you have any further questions on how to prepare for flooding, please call Floodline on 0845 988 1188.

This area may be at risk from other types of flooding.

- [Check your risk of flooding from surface water.](#)
- [Check your risk of flooding from reservoirs.](#)

For the purposes of the Flood Risk Regulations 2009 and the EU Directive 2007/60/EC on the assessment and management of flood risks, this is a Flood Hazard Map

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Interactive Maps

Risk of Flooding from Rivers and Sea for X:337234, Y:417718

The location you have selected is in an area that has a medium chance of flooding from rivers or the sea.



What does 'medium' mean?

Medium means that each year, this area has a chance of flooding of between 1 in 100 (1%) and 1 in 30 (3.3%).

This takes into account the effect of any flood defences that may be in this area. Flood defences reduce, but do not completely stop the chance of flooding and they can be overtopped or fail.

Floods Destroy. Be prepared

Don't wait until it's too late. Prepare for flooding by following some simple steps to reduce the impact of flooding on your home or business.

- [Sign up for free flood warnings](#)
- [Complete a flood plan](#)
- [Find out how to prepare your property for flooding](#)

Planning a development

This information is not suitable for use in land-use planning. If you are planning a development, you need to use the [Risk of Flooding for Land-Use Planning \(Rivers and Sea\) for England](#) or [Development Advisory Map for Wales](#). This is because for planning purposes you need to use information based on flooding without defences.

Further information

Flood risk in this area is 'significant' as per the definition in the 'Statement of Principles' agreement between the Government and the Association of British Insurers (ABI). ABI members voluntarily continue to meet their commitments to their existing customers under this agreement until a replacement is implemented. For more information, see:

- [ABI – Statement of Principles](#)
- [Gov.uk – Statement of Principles](#)

You can use the information in this area to see the areas that would flood and how deep they would flood, and also get an idea of how fast the water may flow.

You can also check the [level and flow estimates for rivers and sea](#), and the [latest river and sea levels](#).

If you have any further questions on how to prepare for flooding, please call Floodline on 0845 988 1188.

This area may be at risk from other types of flooding.

- Check your risk of flooding from [surface water](#).
- Check your risk of flooding from [reservoirs](#).

For the purposes of the Flood Risk Regulations 2009 and the EU Directive 2007/60/EC on the assessment and management of flood risks, this is a Flood Hazard Map

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Last updated: 03 September 2015

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Enter a postcode or place name:

Other topics for this area...



[View other Interactive Maps](#)

Risk of Flooding from Reservoirs

Reservoir flooding is extremely unlikely to happen.

The shading on the map shows the area that could be flooded if a large reservoir were to fail and release the water it holds. A large reservoir is one that holds over 25,000 cubic metres of water, equivalent to approximately 10 Olympic sized swimming pools. Since this is a worst case scenario, it's unlikely that any actual flood would be this large.

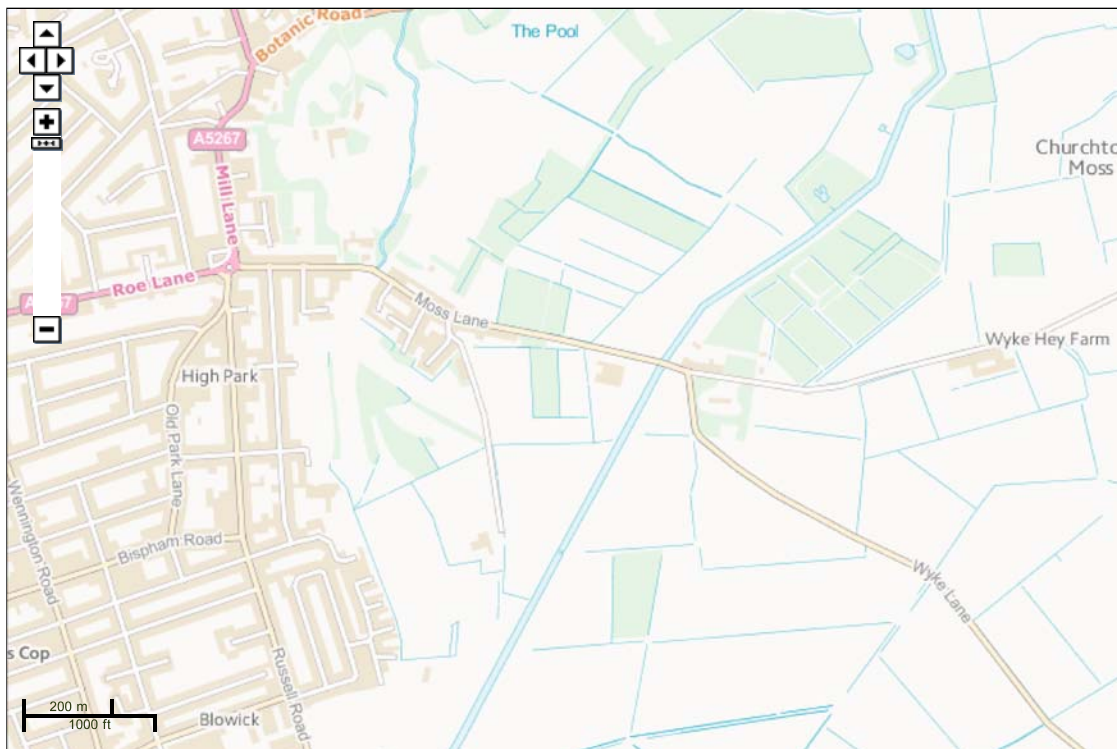
Click on the shading to see details of reservoirs that could cause flooding in this area.

Map of X: 337,085; Y: 417,685 at scale 1:10,000

[Data search](#)

Map legend

- Risk of Flooding from Reservoirs
- Maximum extent of flooding
- Other national environmental organisations
- Natural Resources Wales Area of responsibility
- Scottish Environment Protection Agency Area of responsibility



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Last updated: 03 September 2015

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Enter a postcode or place name:

Other topics for this area...



[View other Interactive Maps](#)

Risk of Flooding from Surface Water

Surface water flooding happens when rainwater does not drain away through the normal drainage systems or soak into the ground, but lies on or flows over the ground instead.

The shading on the map shows the risk of flooding from surface water in this particular area.

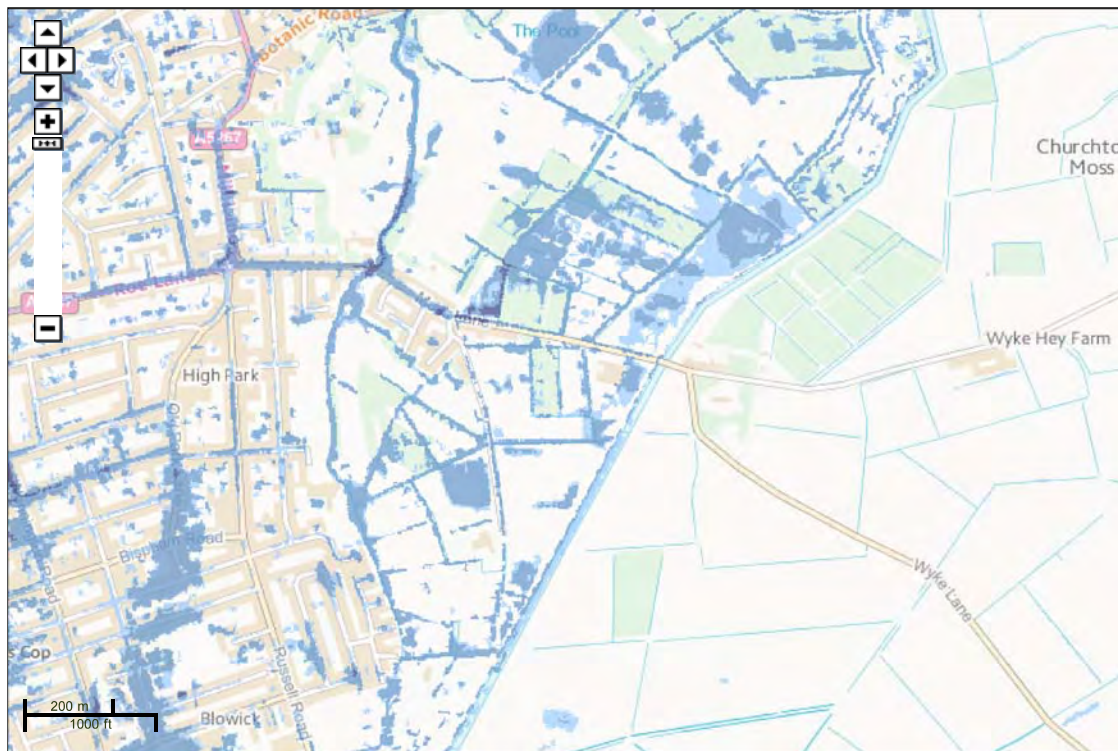
Click on the map for a more detailed explanation.

Map of X: 337,085; Y: 417,685 at scale 1:10,000

[Data search](#)

Map legend

- Risk of Flooding from Surface Water
- High
- Medium
- Low
- Very Low
- Other national environmental organisations
- Natural Resources Wales Area of responsibility
- Scottish Environment Protection Agency Area of responsibility



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Last updated: 03 September 2015

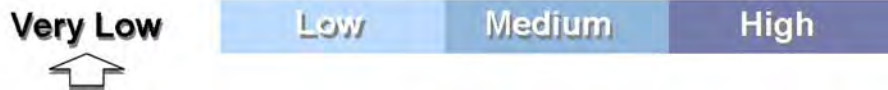
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Interactive Maps

Risk of Flooding from Surface Water for X:337072, Y:417580

The location you have selected is in an area that has a very low chance of flooding from surface water.



What does 'very low' mean?

Very low means that each year, this area has a chance of flooding of less than 1 in 1000 (0.1%).

This type of flooding can be difficult to predict, much more so than river or sea flooding as it is hard to forecast exactly where or how much rain will fall in any storm.

This is based on the best information we have available, such as ground levels and drainage.

Floods Destroy. Be prepared

Don't wait until it's too late. Prepare for flooding by taking some simple steps to reduce the impact on your home or business.

- [Complete a flood plan](#)
- [Find out how to prepare your property for flooding](#)
- [Check the three-day flood risk forecast](#)

Further Information

The map has been produced by the Environment Agency, using information from Lead Local Flood Authorities where it is available. Lead Local Flood Authorities are responsible for managing the risk from surface water flooding.

If you have questions about how the map was produced, please call Floodline on 0845 988 1188.

If you would like more information on how surface water is being managed in this area, you can speak to [Sefton Metropolitan Borough Council](#).

You can use the information in this area to see the approximate areas that would flood, and which parts would be shallower or deeper.

The potential impact of surface water flooding can vary according to the depth of the water, and its velocity (speed and direction that it is flowing in).

This area may be at risk from other types of flooding.

- [Check your risk of flooding from rivers and sea.](#)
- [Check your risk of flooding from reservoirs.](#)

For the purposes of the Flood Risk Regulations 2009 and the EU Directive 2007/60/EC on the assessment and management of flood risks, this is a Flood Hazard Map.

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Last updated: 03 September 2015

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Interactive Maps

Risk of Flooding from Surface Water for X:337129, Y:417570

The location you have selected is in an area that has a low chance of flooding from surface water.



What does 'low' mean?

Low means that each year, this area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%).

This type of flooding can be difficult to predict, much more so than river or sea flooding as it is hard to forecast exactly where or how much rain will fall in any storm.

This is based on the best information we have available, such as ground levels and drainage.

Floods Destroy. Be prepared

Don't wait until it's too late. Prepare for flooding by taking some simple steps to reduce the impact on your home or business.

- [Complete a flood plan](#)
- [Find out how to prepare your property for flooding](#)
- [Check the three-day flood risk forecast](#)

Further Information

The map has been produced by the Environment Agency, using information from Lead Local Flood Authorities where it is available. Lead Local Flood Authorities are responsible for managing the risk from surface water flooding.

If you have questions about how the map was produced, please call Floodline on 0845 988 1188.

If you would like more information on how surface water is being managed in this area, you can speak to [Sefton Metropolitan Borough Council](#).

You can use the information in this area to see the approximate areas that would flood, and which parts would be shallower or deeper.

The potential impact of surface water flooding can vary according to the depth of the water, and its velocity (speed and direction that it is flowing in).

- [View surface water depth estimates for this area.](#)
- [View surface water velocity estimates for this area.](#)

This area may be at risk from other types of flooding.

- [Check your risk of flooding from rivers and sea.](#)
- [Check your risk of flooding from reservoirs.](#)

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Interactive Maps

Risk of Flooding from Surface Water for X:337231, Y:417693

The location you have selected is in an area that has a medium chance of flooding from surface water.



What does 'medium' mean?

Medium means that each year, this area has a chance of flooding of between 1 in 100 (1%) and 1 in 30 (3.3%).

This type of flooding can be difficult to predict, much more so than river or sea flooding as it is hard to forecast exactly where or how much rain will fall in any storm.

This is based on the best information we have available, such as ground levels and drainage.

Floods Destroy. Be prepared

Don't wait until it's too late. Prepare for flooding by taking some simple steps to reduce the impact on your home or business.

- [Complete a flood plan](#)
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- [Check the three-day flood risk forecast](#)

Further Information

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If you have questions about how the map was produced, please call Floodline on 0845 988 1188.

If you would like more information on how surface water is being managed in this area, you can speak to [Sefton Metropolitan Borough Council](#).

You can use the information in this area to see the approximate areas that would flood, and which parts would be shallower or deeper.

The potential impact of surface water flooding can vary according to the depth of the water, and its velocity (speed and direction that it is flowing in).

- [View surface water depth estimates for this area.](#)
- [View surface water velocity estimates for this area.](#)

This area may be at risk from other types of flooding.

- [Check your risk of flooding from rivers and sea.](#)
- [Check your risk of flooding from reservoirs.](#)

For the purposes of the Flood Risk Regulations 2009 and the EU Directive 2007/60/EC on the assessment and management of flood risks, this is a Flood Hazard Map.

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Enter a postcode or place name:



Other topics for this area...

Flood Warning

Map legend

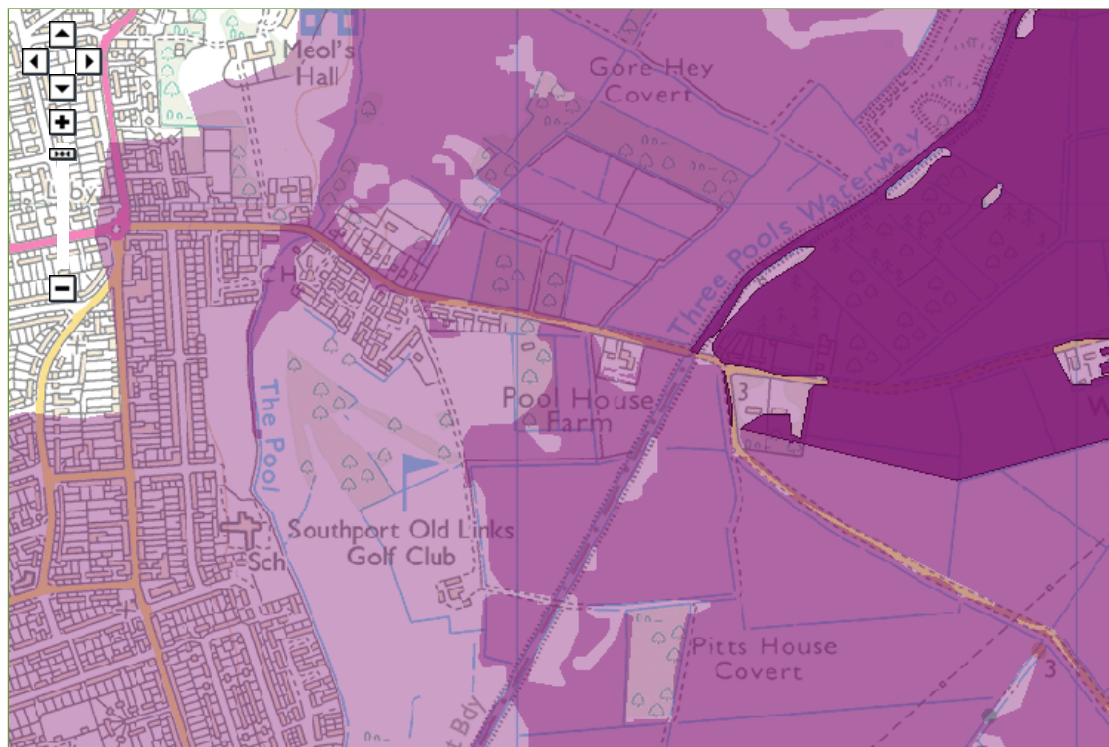
- Click on an area for details.
- Flood Warning Areas
- Areas where we issue flood warnings
- Flood Alert Areas
- Areas where we issue flood alerts
- River and Sea levels

Map of X: 337,085; Y: 417,685 at scale 1:10,000

[Other maps](#)

[Data search](#)

[Text only version](#)



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More about Flood Warnings:

Flood Warning Areas

If your home or business is within a purple shaded area on the map then you can receive free flood warnings. We issue flood warnings to specific areas when flooding is expected. **If you receive a flood warning you should take immediate action.**

For further information visit our [Flood warning pages](#).

Flood Alert Areas

If your home or business is within a pink shaded area on the map then you can receive free flood alerts. We issue flood alerts when flooding is possible. In many areas we issue flood alerts for flooding from rivers, the sea and groundwater. **If you receive a flood alert you should be prepared for flooding and to take action.**

It is very difficult to predict the exact location of flooding from groundwater as it is often related to local geology. We can't say for definite which properties are at risk from groundwater flooding. To help people we provide flood alerts for large areas that could be affected if groundwater levels were high.

For further information visit our [Flood warning pages](#).

River Levels

River level monitoring sensors are placed in the waters at key points and measure changes in water level. This data is recorded at 15 minute intervals; it's then sent back to our offices to be published online at least once a day. The information may be updated more frequently to meet operational needs, for example when water levels are high. This is the most up to date information available about river and sea levels.

For further information visit our [River and Sea Levels pages](#).



Enter a postcode or place name:

Other topics for this area...

Groundwater



Map legend

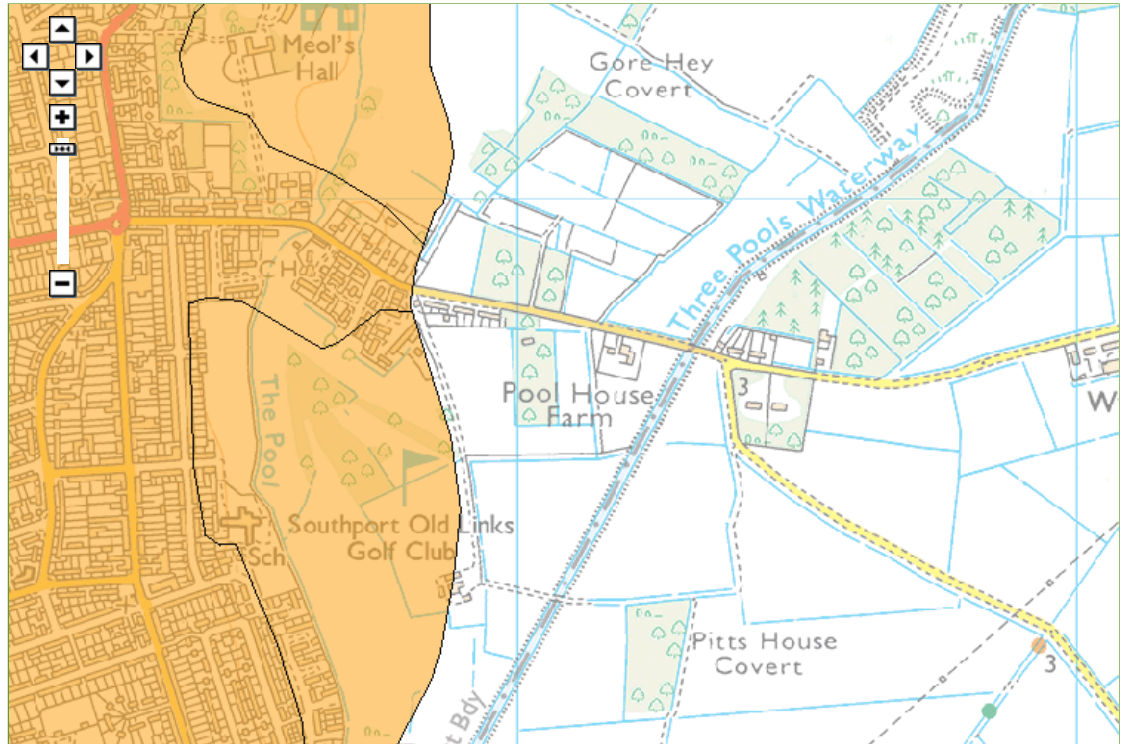
Map of X: 337,085; Y: 417,685 at scale 1:10,000

[Other maps](#)

[Data search](#)

[Text only version](#)

- Groundwater source protection zones
- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)
- BGS Aquifer Maps - Superficial Deposits Designation
- Principal
- Secondary A
- Secondary B
- Secondary (undifferentiated)
- Unknown (lakes and landlip)
- BGS Aquifer Maps - Bedrock Designation
- Principal
- Secondary A
- Secondary B
- Secondary (undifferentiated)
- Groundwater Vulnerability Zones
- Major Aquifer High
- Major Aquifer Intermediate
- Major Aquifer Low
- Minor Aquifer High
- Minor Aquifer Intermediate
- Minor Aquifer Low
- Other national environmental organisations
- Natural Resources Wales Area of responsibility
- Scottish Environment Protection Agency Area of responsibility



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More about Groundwater

Groundwater Source Protection Zones:

Groundwater provides a third of our drinking water. We ensure that your water is safe to drink defining Source Protection Zones. These zones help to monitor the risk of contamination from any activities that might cause pollution in the area.

The Source Protection Zones are not displayed at scales greater than 1:20,000 (Ordnance Survey 1:50,000 scale) as the data was only modelled to this level and is not accurate pass this. They should not be compared against field boundaries.

[Understanding Groundwater Source Protection Zones maps](#)

British Geological Survey's Aquifer Maps:

From 1st April 2010 new aquifer designations replace the old system of classifying aquifers as Major, Minor and Non-Aquifer. This new system is in line with our Groundwater Protection Policy (GP3) and the Water Framework Directive (WFD) and is based on British Geological Survey mapping.

The Aquifer Extents are not displayed at scales greater than 1:75,000 (Ordnance Survey 1:250,000 scale) as the data was only modelled to this level and is not accurate pass this.

[Understanding the British Geological Survey's Aquifer maps](#)

Groundwater Vulnerability Maps:

The Environment Agency are currently updating their groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps will be released later in 2015.

The 'New groundwater vulnerability mapping methodology' report provides technical information about how the new maps have been created.

The [user guide](#) outlines the kinds of activities the new maps can be used for.

These reports have been published on [GOV.UK](#) in advance of the release of the new maps to give users time to understand the new approach and how this differs from the previous groundwater vulnerability maps.



Enter a postcode or place name:

Other topics for this area...

Groundwater



Map legend

X: 337,769;Y: 418,695 at scale 1:75,000

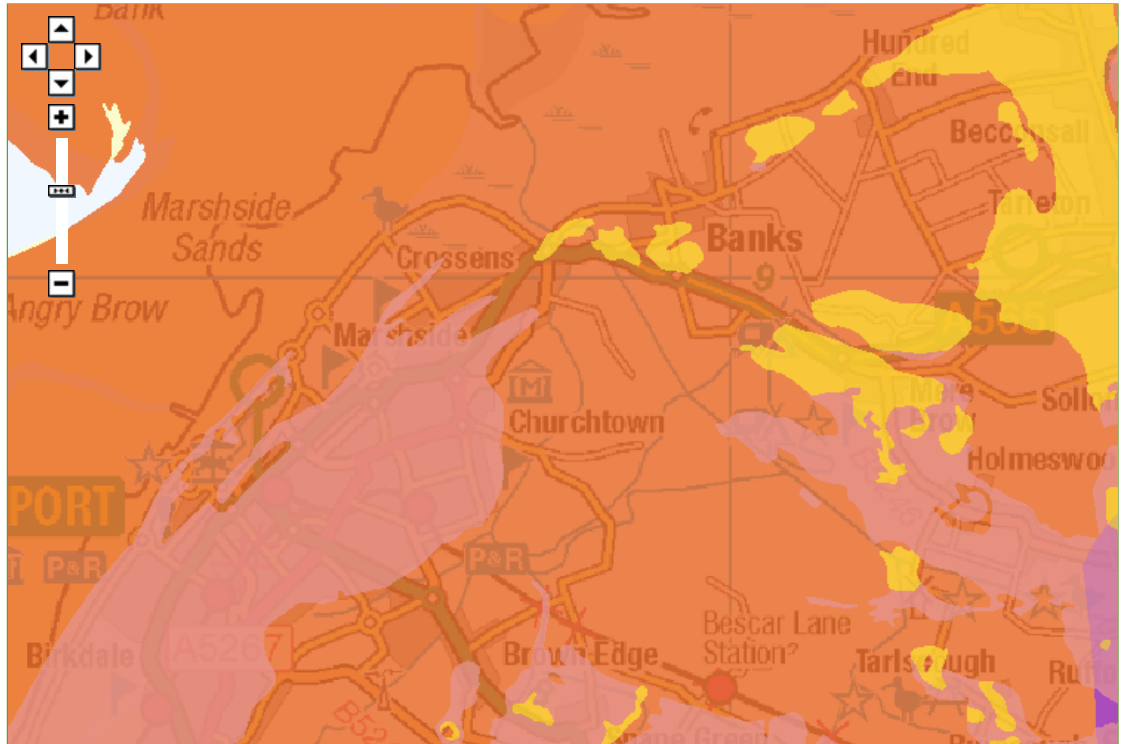
[Other maps](#)

[Data search](#)

[Text only version](#)

<input type="checkbox"/>	Groundwater source protection zones
<input checked="" type="checkbox"/>	BGS Aquifer Maps - Superficial Deposits Designation
<input type="checkbox"/>	BGS Aquifer Maps - Bedrock Designation
<input type="checkbox"/>	Groundwater Vulnerability Zones
<input type="checkbox"/>	Other national environmental organisations

- Principal
- Secondary A
- Secondary B
- Secondary (undifferentiated)
- Unknown (lakes and landslip)



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