

CABINET REPORT

15th August 2011



Report of: Director of Regeneration and Neighbourhoods.

Subject: PFRA - PRELIMINARY FLOOD RISK ASSESSMENT REPORT.

SUMMARY

1. PURPOSE OF REPORT

The report presents the Preliminary Flood Risk Assessment (PFRA) Report for Hartlepool produced in compliance with the Flood Risk Regulations 2009.

2. SUMMARY OF CONTENTS

The report provides a brief background to the Flood Risk Regulations and summarises the conclusions of the PFRA.

3. RELEVANCE TO CABINET

The PFRA is required under legislation and relates to flooding, which is a Borough wide issue.

4. TYPE OF DECISION

This is a non key decision.

5. DECISION MAKING ROUTE

Cabinet on 15th August 2011.

6. DECISION(S) REQUIRED

To note the conclusion of the PFRA that although Flood Risk Areas do exist within Hartlepool, there are no Flood Risk Areas within Hartlepool which are of National significance and authorise Officers to forward the PFRA to the Environment Agency.

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Subject: PFRA - PRELIMINARY FLOOD RISK ASSESSMENT REPORT.

1. PURPOSE OF REPORT

- 1.1 The report presents the Preliminary Flood Risk Assessment (PFRA) Report for Hartlepool produced in compliance with the Flood Risk Regulations 2009.

2. BACKGROUND

- 2.1 A previous report to Cabinet dated 9th May 2011 entitled “Update – Flood and Water Management Act (2010) and Flood Risk Regulations (2009)” discussed the legislative requirement for the Council to produce a PFRA in order to comply with the Flood Risk Regulations 2009.
- 2.2 The Flood Risk Regulations 2009 implement the European Floods Directive and provide a consistent approach to managing flood risk across Europe through a six year planning cycle based on a four stage process of:-
- Undertaking a Preliminary Flood Risk Assessment;
 - Identifying flood risk areas;
 - Prepare flood hazard and flood risk maps;
 - Prepare flood risk management plans.
- 2.3 The PFRA is a high level screening exercise which involves collecting information on past (historic) and future (potential) floods, assembling it into a preliminary assessment report and using it to identify Flood Risk Areas. The PFRA comprises the Preliminary Assessment Report (PAR) and a supporting Preliminary Assessment Spreadsheet.

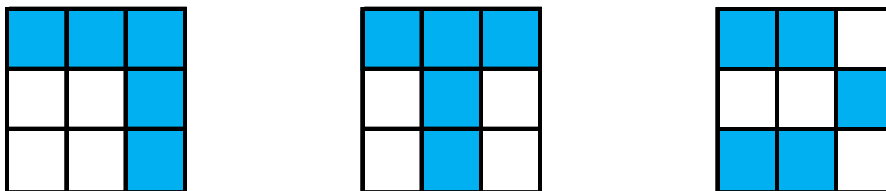
3. PFRA REPORT (SUMMARY)

- 3.1 In order to ensure a consistent national approach for completing a PFRA, Defra has identified an impact threshold based on a 1km square grid whereby the grid square is classed as a significant risk area if it contains:-
- 200 people; or
 - 20 businesses; or
 - 1 critical service at risk
- 3.2 The Environment Agency then assessed this criteria against their own national datasets, to determine indicative Flood Risk Areas. Within

Hartlepool there are 136 No. 1km grid squares; 12 of which exceed the thresholds listed above.

- 3.3 Nationally Significant Flood Risk Areas reflect sites where large concentrations of local indicative areas of significant risk exist. In England for national consistency, areas containing a square matrix of 9 squares each 1km x 1km are first developed. These areas are then populated with local flood risk information and a cluster is formed if these areas contain five or more touching squares of significant local flood risk (blue squares).

Significant Area Clustering Approach



- 3.4 Clustered areas that have been identified using this methodology and which exceed 30,000 people at risk of flooding meet the definition of a Flood Risk Area.
- 3.5 Considering the 12 indicative flood risk areas identified within Hartlepool (paragraph 3.2 above), there are two locations where the groupings of these areas satisfy the clustering methodology (i.e. 5 or more touching squares) explained above. However In both of these cases, the number of properties affected in the cluster are **significantly** below the 30,000 people at risk threshold required to be classified as a Flood Risk Area.
- 3.6 The conclusion of the PFRA report is that although flood risk areas do exist within Hartlepool, **there are no Flood Risk Areas within Hartlepool which are of National significance.**
- 3.7 The absence of a Significant Flood Risk Area within Hartlepool means that the next stage of the PFRA process is not triggered. The Council therefore does not have to produce flood hazard maps, flood risk maps and flood risk management plans.
- 3.8 The PFRA report and figures are included as **Appendix 1** to this report.

4. NEXT STEPS

- 4.1 The PFRA is to be forwarded to the Environment Agency who have a role to review, collate and publish the outputs.
- 4.2 The PFRA cycle will start again in 2016; it is therefore important to ensure that information is maintained and kept up to date for future use and to support other flood risk assessments.

5.0 FINANCIAL CONSIDERATIONS

- 5.1 The PFRA has been funded from grant provided by DEFRA to all Local Lead Flood Authorities.

6.0 RECOMMENDATIONS

- 6.1 It is recommended that Cabinet note the conclusion of the PFRA that although Flood Risk Areas do exist within Hartlepool, there are no Flood Risk Areas within Hartlepool which are of National significance and authorise Officers to forward the PFRA to the Environment Agency.

7.0 REASON FOR RECOMMENDATIONS

- 7.1 To ensure that key statutory objectives relating to flood risk management for the Borough of Hartlepool are delivered.

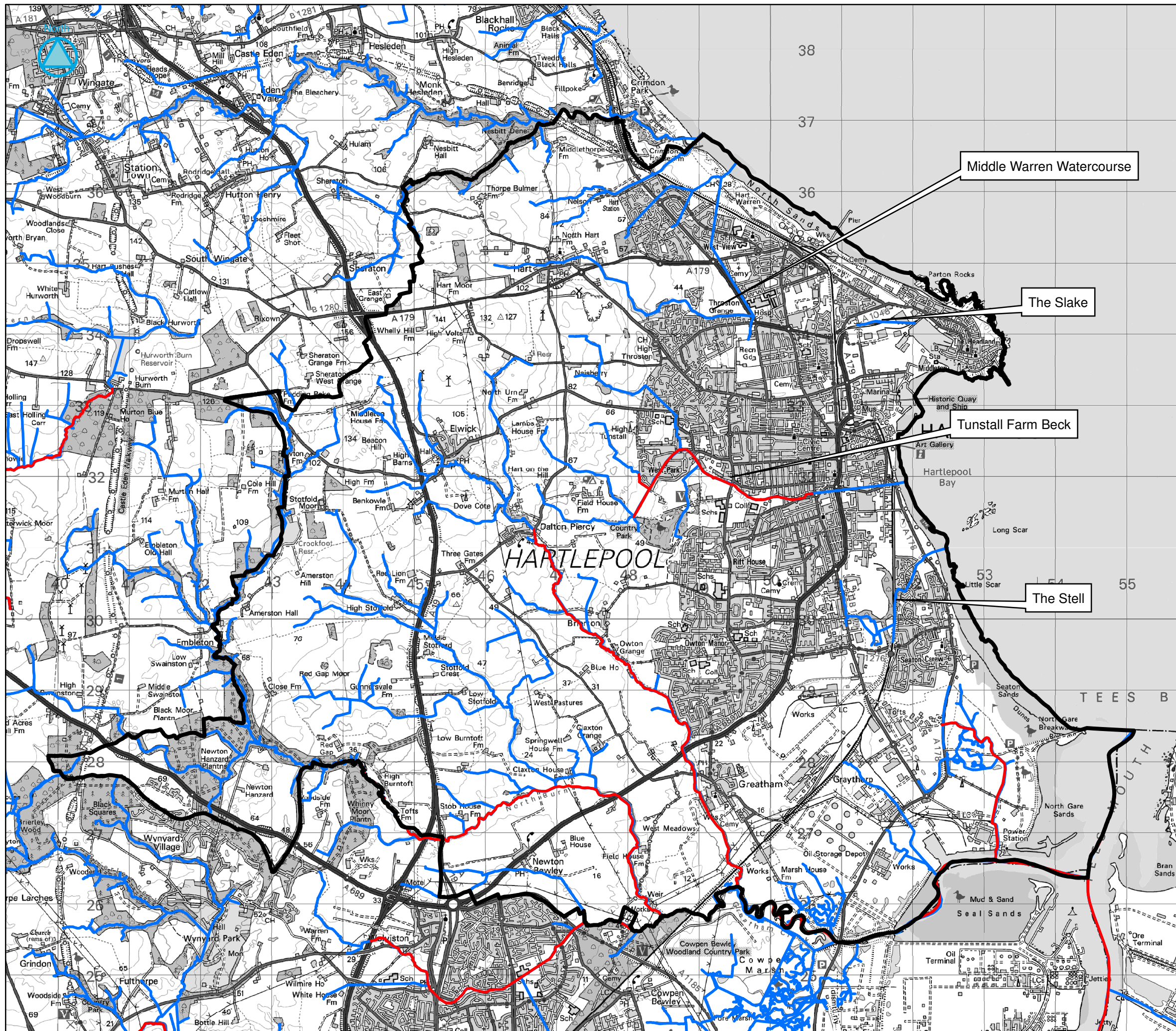
8.0 BACKGROUND PAPERS

1. Flood Risk Regulations – November 2009.
2. Selecting and Reviewing Flood Risk Areas for local sources of flooding (DEFRA) – 2010.
3. Preliminary Flood Risk Assessments, Final Guide (Environment Agency) – December 2010.
4. Cabinet Report dated 9th May 2010.
5. Scheme files in the Engineering Consultancy Section.

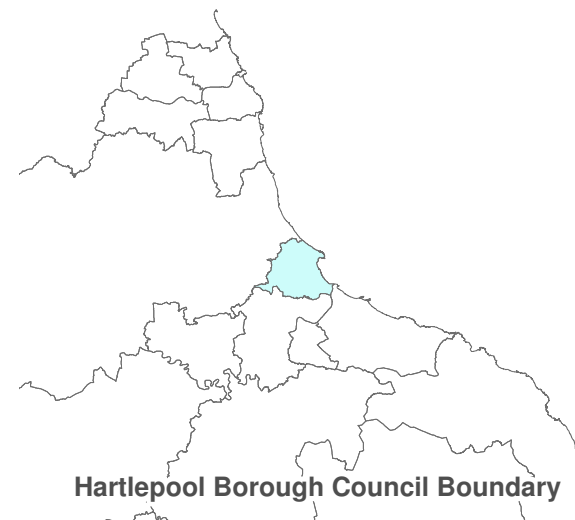
9.0 CONTACT OFFICER

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Regeneration and Neighbourhoods,
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Location Plan



Legend

- Hartlepool Borough Council Boundary
- Main River
- Ordinary Watercourse

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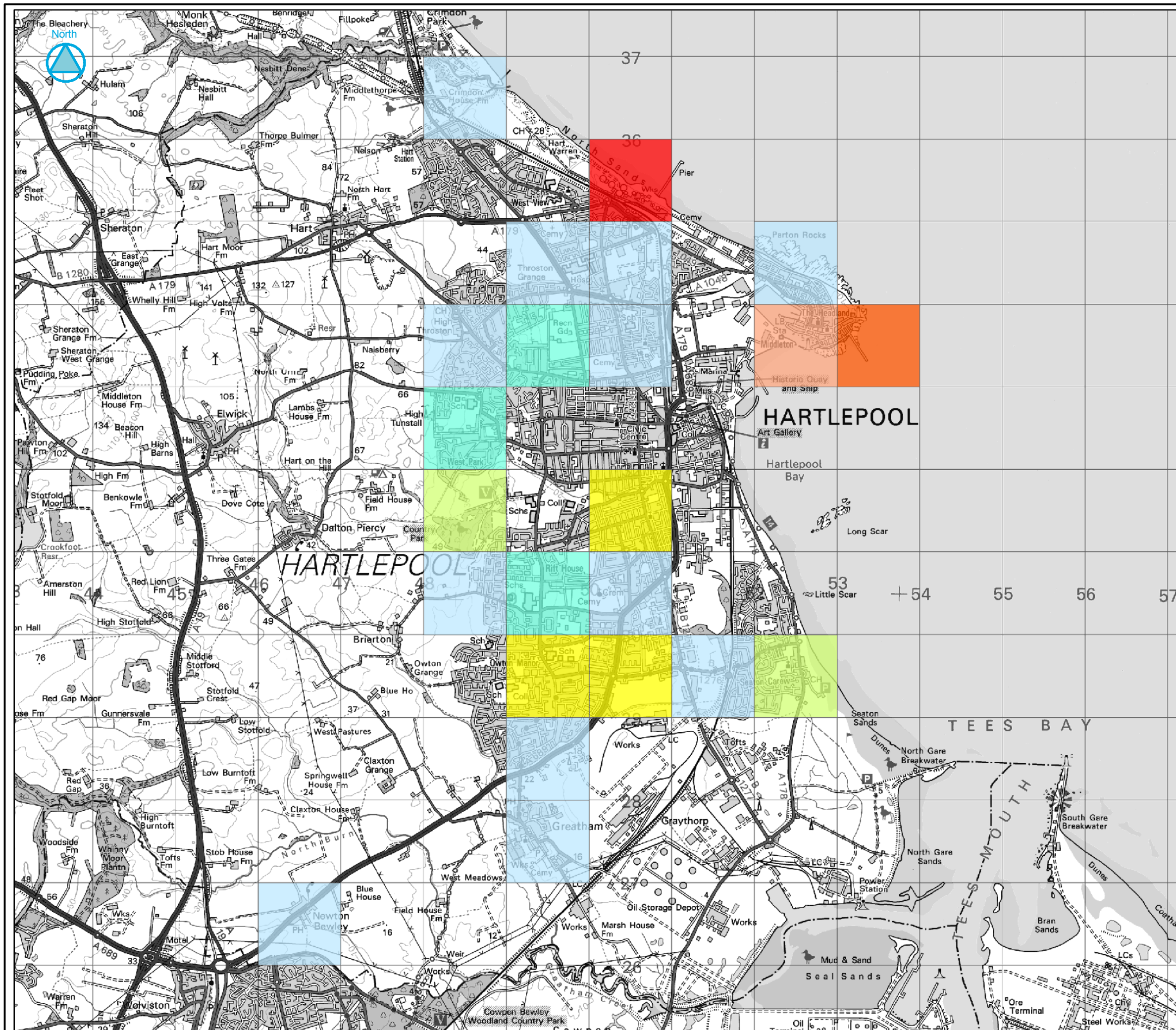
HARTLEPOOL BOROUGH COUNCIL PRELIMINARY FLOOD RISK ASSESSMENT

Site Overview

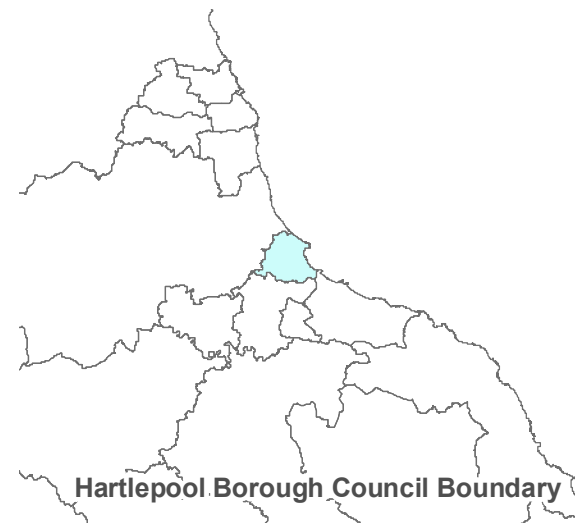
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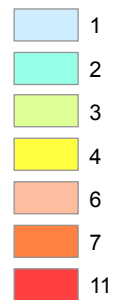


Location Plan



Legend

Internal Flooding Property Counts



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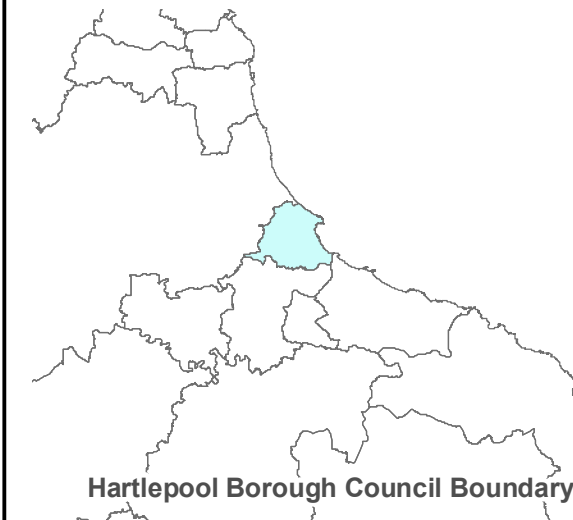
HARTLEPOOL BOROUGH COUNCIL PRELIMINARY FLOOD RISK ASSESSMENT Historical Flooding Significance Assessment - August 2003

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Location Plan



Legend

- Historical Incident
- ASTSWF Predicted Incident
- Historical Coincides with ASTSWF

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HARTLEPOOL BOROUGH COUNCIL PRELIMINARY FLOOD RISK ASSESSMENT

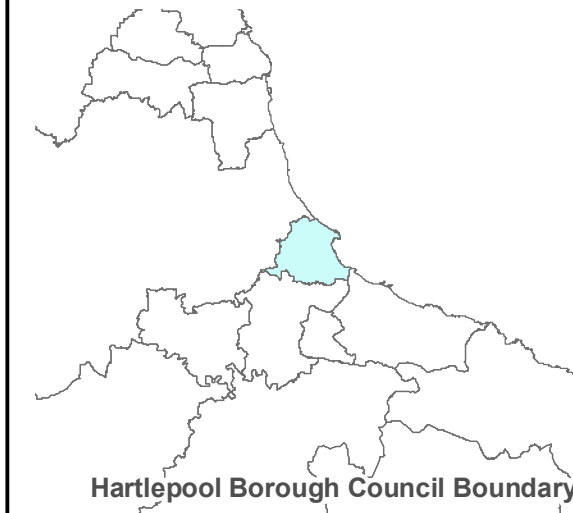
Locally Agreed Surface Water Information
ASTSWF Map Assessment

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Location Plan



Legend

- Historical Incident
- FMfSW Predicted Incident
- Historical Coincides with FMfSW

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HARTLEPOOL BOROUGH COUNCIL PRELIMINARY FLOOD RISK ASSESSMENT

Locally Agreed Surface Water Information FMfSW Map Assessment

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Location Plan



Legend

- Historical Incident
- SFRA Predicted Incident
- Historical Coincides with SFRA

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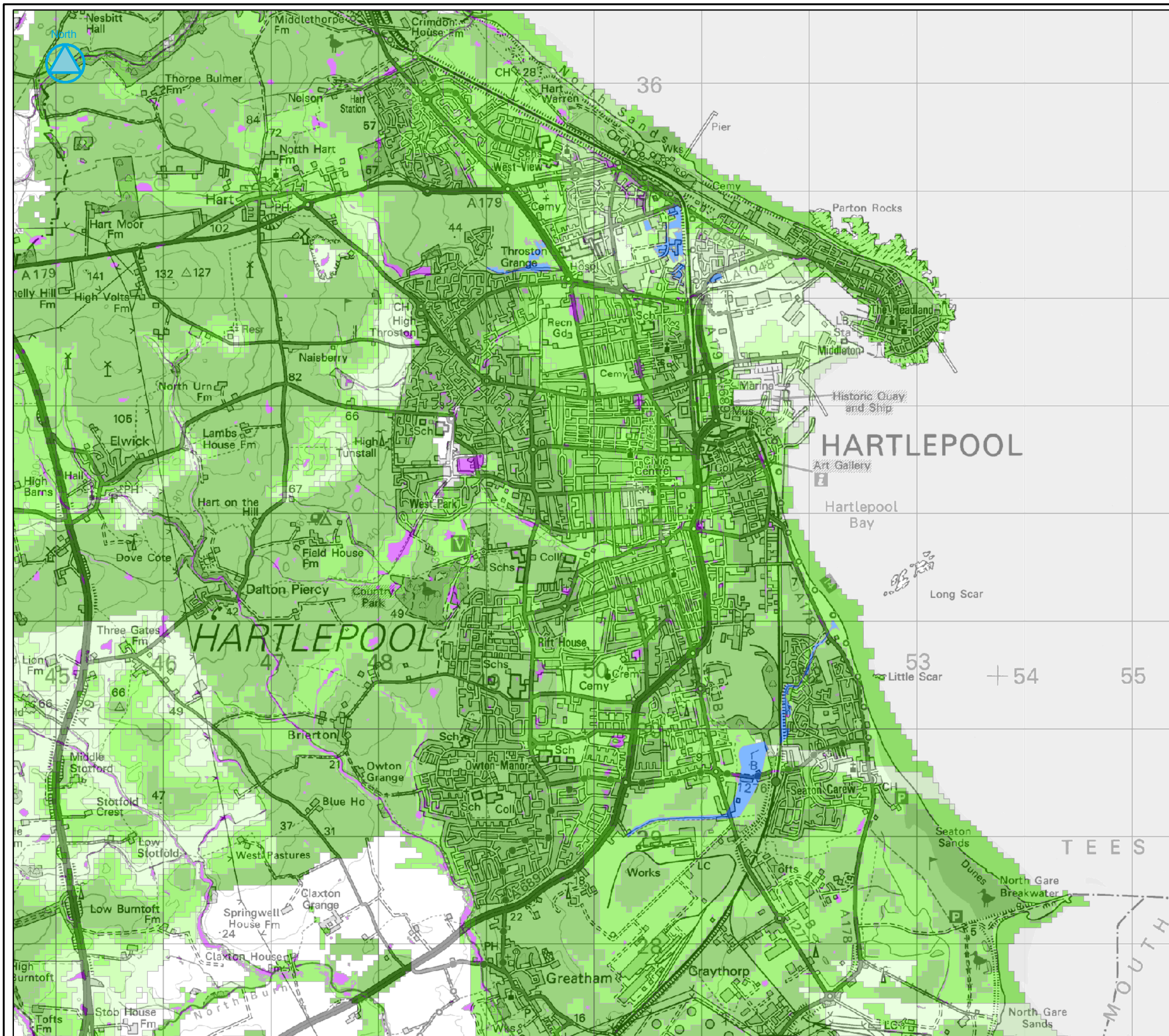
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HARTLEPOOL BOROUGH COUNCIL PRELIMINARY FLOOD RISK ASSESSMENT

Locally Agreed Surface Water Information SFRA Map Assessment

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Location Plan



Legend

- Ordinary Watercourse Flood Risk (Flood Zones and SFRA)
- Surface Water Flood Risk (FmFSW Deep)
- Groundwater Flood Risk**
 - Very High
 - High
 - Moderate
 - Low
 - Very Low

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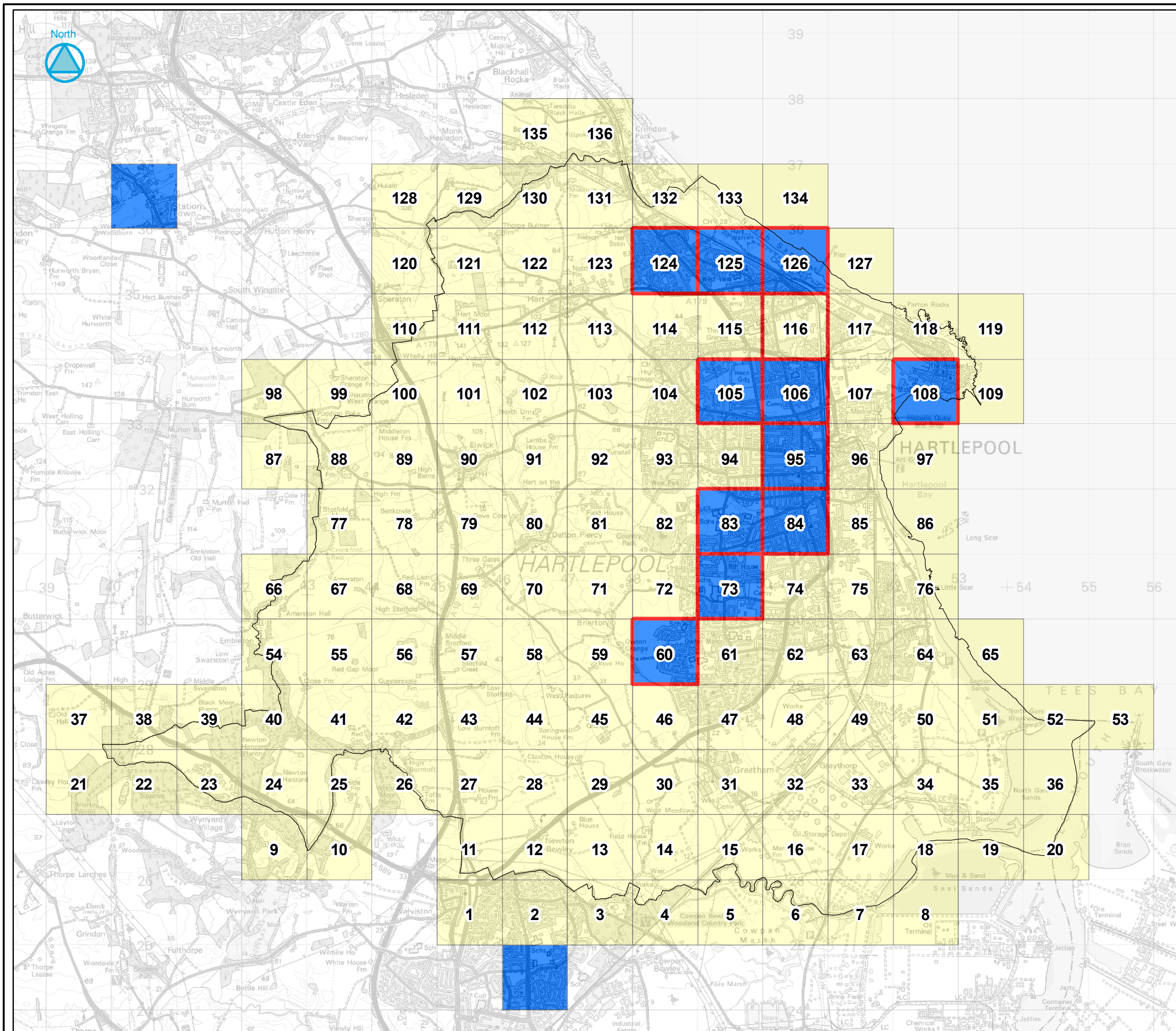
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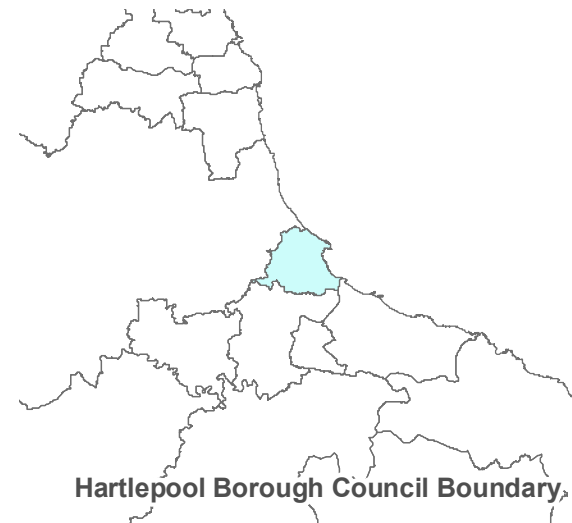
Locally Agreed Surface Water Information
Final Dataset

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Location Plan



Legend

- Final Significant Risk Areas
- Environment Agency Significant Risk Areas
- 1km Grid

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HARTLEPOOL BOROUGH COUNCIL PRELIMINARY FLOOD RISK ASSESSMENT

Assessment of Significant Risk Areas

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