75% of ASiGW - Critical Infrastructure

Areas Susceptible to Groundwater Flooding (ASiGW) is a strategic scale map showing groundwater flood areas on a 1km square grid. It was developed specifically by the Agency for use by Lead Local Flood Authorities (LLFAs) for use in PFRAs.

**Halton Borough Boundary**

**Hotspots for ASiGW_75percent_KM**

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency's detailed method of counting.
75% of ASTGWF - Non-Residential

Areas Susceptible to Groundwater Flooding (ASTGWF) is a strategic scale map showing groundwater flood areas on a 1km square grid. It was developed specifically by the Agency for use by Lead Local Flood Authorities (LLFAs) for use in PFRAs.

- Halton Borough Boundary
- Hotspots for ASTGWF_75percent_KM

Economic:
- ASTGWF_75percent_NR
- Negligible Consequence
- Less Consequence (0.01 - 9.99)
- Intermediate Consequence (10 - 14.99)
- More Consequence (15 - 19.99)
- Adverse Consequence (20 - 168)

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency's detailed method of counting.
Areas Susceptible to Groundwater Flooding (ASiGWF) is a strategic scale map showing groundwater flood areas on a 1km square grid. It was developed specifically by the Agency for use by Lead Local Flood Authorities (LLFAs) for use in PFRAs. Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:
1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) < 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20
Indicators calculated using the Environment Agency’s detailed method of counting for flood risk assessment.
75% of ASGWF - Residential

Areas Susceptible to Groundwater Flooding (ASGWF) is a strategic scale map showing groundwater flood areas on a 1km square grid. It was developed specifically by the Agency for use by Lead Local Flood Authorities (LLFAs) for use in PFRAs.

- Halton Borough Boundary
- Hotspots for ASGWF_75percent_KM

Human Health:
- ASGWF_75percent_Residential
  - Negligible Consequence
  - Less Consequence (0.01 - 9.99)
  - Intermediate Consequence (10 - 42.99)
  - More Consequence (43 - 85.5)
  - Adverse Consequence (85.51 - 500)

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency's detailed method of counting

This document is the property of Jeremy Benn Associates Ltd. It shall not be reproduced in whole or in part, nor disclosed to a third party, without the permission of Jeremy Benn Associates Ltd.

Drawn: R Whitham
Date: 01/04/2011
Status: Final
Drawing Number: ASGW_Res
OS Licence: Contains Ordnance Survey data (c) Crown copyright and database
Areas Susceptible to Groundwater Flooding (AStGWF) is a strategic scale map showing groundwater flood areas on a 1km square grid. It was developed specifically by the Agency for use by Lead Local Flood Authorities (LLFAs) for use in PFRAs.

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency's detailed method of counting.
PRFA Analysis
Halton Borough Council

FMISW - Critical Infrastructure

The Flood Map for Surface Water shows areas where surface water would be expected to flow or pond. This map uses a rainfall event with a 1 in 200 chance of occurring in any year, where the flooding is greater than 0.3m deep.

Hotspots for EA_SW_200yr_deep_KM

Halton Borough Boundary

Human Health:

SW200yr_deep_CI

- Negligible Consequence
- Loss Consequence (0.01 - 1)
- Intermediate Consequence (1.01 - 5)
- More Consequence (5.01 - 10)
- Adverse Consequence (10.01 - 11)

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency’s detailed method of counting.

This document is the property of Jeremy Benn Associates Ltd. It shall not be reproduced in whole or in part, nor disclosed to a third party, without the permission of Jeremy Benn Associates Ltd.

Drawn: R Whitham
Date: 01/04/2011
Status: Final
Drawing Number: FMISW 200yr Deep_Ci

OS Licence: Contains Ordnance Survey data (c) Crown copyright and database.
The Flood Map for Surface Water shows areas where surface water would be expected to flow or pond. This map uses a rainfall event with a 1 in 200 chance of occurring in any year, where the flooding is greater than 0.3m deep.

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency's detailed method of counting.
The Flood Map for Surface Water shows areas where surface water would be expected to flow or pond. This map uses a rainfall event with a 1 in 200 chance of occurring in any year, where the flooding is greater than 0.3m deep.

**Hotspots for EA_SW_200yr_deep_KM**

**Halton Borough Boundary**

**Economic:**

- **EA_SW_200yr_deep_Rail**
  - Negligible Consequence
  - Loss Consequence (0.01 - 250)
  - Intermediate Consequence (250.01 - 500)
  - More Consequence (500.01 - 750)
  - Adverse Consequence (750.01 - 1054.26)

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency's detailed method of counting.
The Flood Map for Surface Water shows areas where surface water would be expected to flow or pond. This map uses a rainfall event with a 1 in 200 chance of occurring in any year, where the flooding is greater than 0.3m deep.

Hotspots for EA, SW, 200yr_deep, KM

Halton Borough Boundary

Human Health:

SW200yr_deep_Residential

- Negligible Consequence
- Loss Consequence (0.01 - 9.99)
- Intermediate Consequence (10 - 42.99)
- More Consequence (43 - 85.5)
- Adverse Consequence (85.51 - 86.5)

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency's detailed method of counting.
The Flood Map for Surface Water shows areas where surface water would be expected to flow or pond. This map uses a rainfall event with a 1 in 200 chance of occurring in any year, where the flooding is greater than 0.3m deep.

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency's detailed method of counting.
The Flood Map for Surface Water shows areas where surface water would be expected to flow or pond. This map uses a rainfall event with a 1 in 200 chance of occurring in any year, where the flooding is greater than 0.1m deep.

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency’s detailed method of counting.
The Flood Map for Surface Water shows areas where surface water would be expected to flow or pond. This map uses a rainfall event with a 1 in 200 chance of occurring in any year, where the flooding is greater than 0.1m deep.

Hotspots for EA, SW_200yr_shallow_KM

Halton Borough Boundary

Economic:

SW200yr_shallow_NR

- Negligible Consequence
- Loss Consequence (0.01 - 9.99)
- Intermediate Consequence (10 - 14.99)
- More Consequence (15 - 19.99)
- Adverse Consequence (20 - 270)

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency’s detailed method of counting.
The Flood Map for Surface Water shows areas where surface water would be expected to flow or pond. This map uses a rainfall event with a 1 in 200 chance of occurring in any year, where the flooding is greater than 0.1m deep.

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency’s detailed method of counting.
PRFA Analysis
Halton Borough Council

FMfSW - Residential

The Flood Map for Surface Water shows areas where surface water would be expected to flow or pond. This map uses a rainfall event with a 1 in 200 chance of occurring in any year, where the flooding is greater than 0.1m deep.

Hotspots for EA, SW 200yr_shallow_KM
Halton Borough Boundary

Human Health:

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency’s detailed method of counting

This document is the property of Jeremy Benn Associates Ltd. It shall not be reproduced in whole or in part, nor disclosed to a third party, without the permission of Jeremy Benn Associates Ltd.

Drawn: R Whitham
Date: 01/04/2011
Status: Final
Drawing Number: FMfSW 200yr Shallow_Res
OS Licence: Contains Ordnance Survey data (c) Crown copyright and database
The Flood Map for Surface Water shows areas where surface water would be expected to flow or pond. This map uses a rainfall event with a 1 in 200 chance of occurring in any year, where the flooding is greater than 0.1m deep.

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency's detailed method of counting.
Flood Zone 2 is the Agency’s best estimate of the areas of land between Zone 3 and the extent of the flood from rivers/from the sea/from rivers and, or the sea with a 0.1% (1 in 1000) chance of flooding in any year.

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency’s detailed method of counting.
Flood Zone 2 is the Agency’s best estimate of the areas of land between Zone 3 and the extent of the flood from rivers/from the sea/from rivers and, or the sea with a 0.1% (1 in 1000) chance of flooding in any year.

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency’s detailed method of counting.
**Flood Zone 2 - Rail**

Flood Zone 2 is the Agency's best estimate of the areas of land between Zone 3 and the extent of the flood from rivers/from the sea/from rivers and, or the sea with a 0.1% (1 in 1000) chance of flooding in any year.

- Halton Borough Boundary
- Hotspots for FloodZone2_KM

**Economic:**

- FloodZone2_Rail
  - Negligible Consequence
  - Less Consequence (0.01 - 250)
  - Intermediate Consequence (250.01 - 500)
  - More Consequence (500.01 - 750)
  - Adverse Consequence (750.01 - 1516.63)

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency's detailed method of counting.
Flood Zone 2 is the Agency's best estimate of the areas of land between Zone 3 and the extent of the flood from rivers/from the sea/from rivers and, or the sea with a 0.1% (1 in 1000) chance of flooding in any year.

Hotspots for FloodZone2_KM
Halton Borough Boundary

Human Health:

FloodZone2_Residential

- Negligible Consequence
- Less Consequence (0.01 - 9.99)
- Intermediate Consequence (10 - 42.99)
- More Consequence (43 - 85.5)
- Adverse Consequence (85.51 - 126)

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency’s detailed method of counting
**PRFA Analysis**

**Halton Borough Council**

**Flood Zone 2 - Roads**

Flood Zone 2 is the Agency's best estimate of the areas of land between Zone 3 and the extent of the flood from rivers/from the sea/from rivers and, or the sea with a 0.1% (1 in 1000) chance of flooding in any year.

- Halton Borough Boundary
- Hotspots for FloodZone2_KM

**Economic:**

FloodZone2_Road

- Negligible Consequence
- Less Consequence (0.01 - 1000)
- Intermediate Consequence (1000.01 - 2000)
- More Consequence (2000.01 - 3000)
- Adverse Consequence (3000.01 - 6184.7)

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency's detailed method of counting.

---

This document is the property of Jeremy Benn Associates Ltd. It shall not be reproduced in whole or in part, not disclosed to a third party, without the permission of Jeremy Benn Associates Ltd.

Drawn: R Witham
Date: 01/04/2011
Status: Final
Drawing Number: FZ2_Roads

OS Licence: Contains Ordnance Survey data (c) Crown copyright and database
Flood Zone 3 is the Agency’s best estimate of the areas of land with a 1% (1 in 100), or greater, chance of flooding each year from rivers, or with a 0.5% (1 in 200) chance, or greater, of flooding each year from the sea.

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency’s detailed method of counting.
Flood Zone 3 is the Agency's best estimate of the areas of land with a 1% (1 in 100), or greater, chance of flooding each year from rivers, or with a 0.5% (1 in 200) chance, or greater, of flooding each year from the sea.

- Halton Borough Boundary
- Hotspots for FloodZone3_KM

Economic:
- FZ3_NR:
  - Negligible Consequence
  - Less Consequence (0.01 - 9.99)
  - Intermediate Consequence (10 - 14.99)
  - More Consequence (15 - 19.99)
  - Adverse Consequence (20 - 248)

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:
1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency’s detailed method of counting.
Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency's detailed method of counting.
Flood Zone 3 is the Agency's best estimate of the areas of land with a 1% (1 in 100), or greater, chance of flooding each year from rivers, or with a 0.5% (1 in 200) chance, or greater, of flooding each year from the sea.

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency's detailed method of counting.
Flood Zone 3 is the Agency’s best estimate of the areas of land with a 1% (1 in 100), or greater, chance of flooding each year from rivers, or with a 0.5% (1 in 200) chance, or greater, of flooding each year from the sea.

- Hotspots for FloodZone3_KM

**Economic:**

- FloodZone3_Road
  - Negligible Consequence
  - Less Consequence (0.01 - 1000)
  - Intermediate Consequence (1000.01 - 2000)
  - More Consequence (2000.01 - 3000)
  - Adverse Consequence (3000.01 - 5703.41)

Hotspots are 1km grid squares where at least one of the following flood risk indicators is above the threshold given below:

1. Number of people > 200 (200/2.34 (nationally agreed average occupancy per household) = 85.5)
2. Critical Services > 10
3. Number of Non-Residential Properties > 20

Indicators calculated using the Environment Agency’s detailed method of counting.