

Ref.	Streets	Lead / Partner	Area / Ward	No. of Properties	Probable Causes	Short Term Action (completed)	Possible Long Term Measures
2012/01	<ul style="list-style-type: none"> Ridgeway The Willows Scott's Court Langley Avenue Beaufront Close Leam Lane The Bowes Railway 	Gateshead Council / NW	Leam Lane <ul style="list-style-type: none"> Wardley & Leam Lane 	Up to 50	<ul style="list-style-type: none"> Surface water runoff from the farm land and Leam Lane to the south Surface water runoff from houses / drives / hardstands onto roads Blocked road gullies Blocked culvert Surcharging culvert? Blocked public sewers Surcharging public sewers Debris from the Bowes Railway path 	<ul style="list-style-type: none"> Public sewers checked by Northumbrian Water Culvert checked and desilted Road gullies jetted and desilted Additional road gullies in the low points on Leam Lane and Ridgeway 	<ul style="list-style-type: none"> Detailed mapping and condition assessment of the public sewers, highway drains and culvert Construct a new culvert inlet on Leam Lane and inspect the inlet monthly Reconstruct the Bowes Railway surface to resist storm water damage Storm water storage?

- The Highway & Flood Risk Management team has submitted a bid to Defra (through the EA) for funding to carry out a feasibility study to precisely determine the causes and mechanics of the flooding.
- The feasibility study will establish the likelihood and risk of further flooding and will determine whether (or not) the 2012 flooding will qualify for a Defra grant for a flood risk management construction scheme.
- Carl Hodgson is working with Northumbrian Water (and their specialist consultant) to prepare a joint feasibility study / scheme to address surface water flooding and public sewer flooding.
- The target date for construction is summer 2016.

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2012/02	<ul style="list-style-type: none"> Noel Avenue Mundle Avenue Holly Avenue Naylor Avenue Spa Well Road 	NW / Gateshead Council	Winlaton Mill <ul style="list-style-type: none"> Winlaton & High Spen 	Up to 30	<ul style="list-style-type: none"> Surface water runoff from the farm land and discharge of public sewers into the stream to the west of Winlaton Mill Surface water runoff from houses / drives / hardstands onto roads Blocked road gullies Blocked culvert inlet Blocked public sewers Surcharging public sewers Debris from the watercourse 	<ul style="list-style-type: none"> Public sewers checked by Northumbrian Water Culvert inlet improved to prevent grill blockages Road gullies jetted and desilted Additional road gullies in the low points on Noel Avenue 	<ul style="list-style-type: none"> NW is installing a major upgrade to the public sewer system It includes works to manage surface water using storm water tanks The scheme is scheduled for completion by April 2015

- The NW scheme was completed in May 2015.
- The improved sewer and storm water systems coped well with the storms of December 2015 and January 2016.

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2012/03	<ul style="list-style-type: none"> Green Lane Gardens Eastwood Gardens Felling Bypass 	Gateshead Council / NW	Nest Estate <ul style="list-style-type: none"> Felling 	Up to 20	<ul style="list-style-type: none"> Surface water runoff from the streets and land above and in front of Green Lane Gardens Surface water runoff and pumped water from the Felling Bypass Blocked road gullies Surcharging public sewers 	<ul style="list-style-type: none"> Public sewers checked by Northumbrian Water Road gullies jetted Large soakaways in the open space land in front of Green Lane Gardens 	<ul style="list-style-type: none"> NW's consultants are undertaking a detailed assessment of the flooding events and a feasibility study for possible improvement works Gateshead Council has made a small financial contribution (£10k) to the study Gateshead Council has secured a Defra FRM grant for surface water management works A joint scheme of public sewer upgrades and surface water management works has been provisionally scheduled for 2016/17

- The Highway & Flood Risk Management team has secured a grant through the EA / Defra for a flood management scheme.
- A feasibility study has established the likelihood and risk of further flooding and identified options for improvement works.
- The target date for construction is summer 2017.

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2012/04	<ul style="list-style-type: none"> Valley Drive Dryden Road Durham Road The Drive Salkeld Gardens 	Gateshead Council / NW	Low Fell <ul style="list-style-type: none"> Deckham Low Fell Saltwell 	Up to 20	<ul style="list-style-type: none"> Surface water runoff from streets and land above Valley Drive Surface water runoff from fields in the Dryden Centre Surface water runoff from houses / drives / hardstands onto Valley Drive Blocked road gullies Surcharging public sewers 	<ul style="list-style-type: none"> Public sewers checked by Northumbrian Water Road gullies jetted New channel drains in Valley Drive / Old Durham Road junction Storm water storage ditch in the Dryden Centre Kerb works on Durham Road 	<ul style="list-style-type: none"> Additional road gullies in the low points on Dryden Road and Durham Road Gateshead Council has secured a Defra FRM grant for property level protection (flood doors, air brick covers etc.) to 12 properties on Salkeld Gardens and Valley Drive The works are being undertaken jointly by Gateshead Council & NW and are scheduled to be completed by April 2015

- Northumbrian Water (NW) has carried out a survey of the public sewers serving the area: no blockages and no significant structural defects were found.
- NW is satisfied that the case for alterations to the public sewerage system is not justified.
- The minor improvements to the road drainage system on Old Durham Road / Valley Drive / Dryden Road and the drainage ditch in the Dryden Centre will reduce the risk of water running onto Durham Road and The Drive.
- An EA / Defra grant was secured for the installation of flood doors, air brick covers, flood barriers etc. for 12 properties on Salkeld Gardens, Valley Drive and Dryden Road. Carl Hodgson worked with NW and a specialist consultant / contractor for the installation of the works.

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2012/05	<ul style="list-style-type: none"> St Mary's Terrace Sunderland Road Shields Road The Drive Heworth Metro Station 	Gateshead Council / NW	Heworth <ul style="list-style-type: none"> Felling Pelaw & Heworth 	Up to 15	<ul style="list-style-type: none"> Surface water runoff from the streets and land above Sunderland Road (Heworth Grange School, the new Heworth Cemetery, The Drive, Watermill Lane, High Heworth Lane) Surface water runoff from houses / drives / hardstands onto roads Blocked road gullies Blocked culvert inlet Surcharging culvert? Surcharging public sewers 	<ul style="list-style-type: none"> Public sewers checked by Northumbrian Water Culvert checked Road gullies jetted 	<ul style="list-style-type: none"> Detailed mapping and condition assessment of the public sewers, highway drains and culvert Detailed assessment of the cemetery drainage system Additional road gullies in the low point on Sunderland Road Increase the frequency of the culvert inlet inspections Storm water storage?

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2012/06	<ul style="list-style-type: none"> Sherburn Park Drive Glen Close Ponthaugh Avon Close 	Gateshead Council / NW	Rowlands Gill <ul style="list-style-type: none"> Chopwell & Rowlands Gill 	Up to 15	<ul style="list-style-type: none"> Surface water runoff from the farm land to the north of Glenn Close Surface water runoff from houses / drives / hardstands onto roads Surcharging public sewers Blocked road gullies Blocked culvert inlet? Blocked public sewers 	<ul style="list-style-type: none"> Public sewers checked by Northumbrian Water Road gullies jetted and desilted Additional road gullies in the low point on Sherburn Park Drive 	<ul style="list-style-type: none"> Detailed mapping and condition assessment of the public sewers, highway drains and culvert Capacity study for the culvert Farm land ditch reinstated Storm water storage?

- The location has a recorded history of flooding caused by run-off from the land to the north.
- The Highway & Flood Risk Management team has submitted a bid to Defra (through the EA) for funding to carry out a feasibility study to precisely determine the causes and mechanics of the flooding.
- The feasibility study will establish the likelihood and risk of further flooding and will determine whether (or not) the 2012 flooding will qualify for a Defra grant for a flood risk management construction scheme.

Ref.	Streets	Lead / Partner	Area / Ward	No. of Properties	Probable Causes	Short Term Action (completed)	Possible Long Term Measures (completed)
2012/07	<ul style="list-style-type: none"> Shelley Drive Keats Walk Blake Walk 	NW / Gateshead Council	S James's Village <ul style="list-style-type: none"> Bridges 	Up to 15	<ul style="list-style-type: none"> Surface water runoff from the streets and land above Shelley Drive Partially blocked (tree roots) and surcharging public sewers Blocked road gullies 	<ul style="list-style-type: none"> Public sewer check / derooting by Northumbrian Water Road gullies jetted Additional road gullies in the low point on Shelley Drive 	<ul style="list-style-type: none"> NW is installing a major upgrade to the public sewer system It includes works to manage surface water using detention tanks and SuDs features Gateshead Council has made a small financial contribution (£10k) for additional works to manage surface water and to improve highway drainage The scheme is scheduled for completion by April 2015

- The NW scheme was completed in June 2015.
- The improved sewer and storm water systems coped well with the storms of December 2015 and January 2016.

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2012/08	<ul style="list-style-type: none"> Field Lane Laburnum Avenue Birch Avenue Sunderland Road 	Gateshead Council / NW	Heworth <ul style="list-style-type: none"> Pelaw & Heworth 	Up to 25	<ul style="list-style-type: none"> Surface water runoff from the Felling Bypass embankment Surface water runoff from houses / drives / hardstands onto Field Lane Surcharging public sewers Blocked road gullies 	<ul style="list-style-type: none"> Public sewers checked by Northumbrian Water Road gullies jetted 	<ul style="list-style-type: none"> NW is installing a major upgrade to the public sewer system It includes works to manage surface water using detention basins and other SuDs features Gateshead Council has made a small financial contribution (£10k) for additional works to manage surface water and to improve highway drainage The scheme is scheduled for completion by April 2015 Gateshead Council has secured a Defra FRM grant for additional surface water management works on Field Lane during 2017/18

- The NW scheme was completed in June 2015.
- The improved sewer and storm water systems coped well with the storms of December 2015 and January 2016.

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2012/09	<ul style="list-style-type: none"> Lobley Hill Road Queensway North Eslington Park River Team 	EA / Gateshead Council	Team Valley <ul style="list-style-type: none"> Lobley Hill & Bensham Dunston & Teams 	Up to 10	<ul style="list-style-type: none"> River Team outside its channel Surface water runoff from factories / houses / drives / hardstands onto roads Blocked road gullies Blocked culvert inlet Surcharging culvert? Surcharging public sewers 	<ul style="list-style-type: none"> EA preliminary assessment Culvert inlet cleared and culvert checked Road gullies jetted Highway drains desilting 	<ul style="list-style-type: none"> The EA has secured a Defra FRM grant for River Team alterations and environmental improvements A joint EA / Gateshead detailed River Team integrated drainage system study has been completed The EA has commissioned a feasibility study to determine options for River Team deculverting and surface water management UK Land Estates has committed to joint funding of the improvement works The works are provisionally scheduled for 2017/18/19

- The joint River Team drainage study is nearing completion and the computer model for the Team Valley Trading Estate catchment is in final verification: the EA is leading on the study.
- The EA has applied for a Defra funded grant to reduce flood risk, improve water quality and to improve river habitat along the River Team from Lamesley to the Tyne.
- The improvement grant is subject to review by Defra and is competing with all major schemes around the country: allocations and the scheme implementation may be delayed by the recent flooding in Southern England.
- UK Land Estates (the main Team Valley land owner) has committed to jointly funding the River Team improvement works.

Ref.	Streets	Lead / Partner	Area / Ward	No. of Properties	Probable Causes	Short Term Action (completed)	Possible Long Term Measures
2012/10	<ul style="list-style-type: none"> Grange Terrace Grange Estate The Crescent 	Gateshead Council / NW	Kibblesworth <ul style="list-style-type: none"> Lamesley 	Up to 10	<ul style="list-style-type: none"> Surface water runoff from farm land and the bridlepath to the south Blocked road gullies Blocked culvert Surcharging culvert? Surcharging public sewers 	<ul style="list-style-type: none"> Public sewers checked by Northumbrian Water Culvert checked Highway drains desilting Road gullies jetted Ditch desilting 	<ul style="list-style-type: none"> Detailed mapping and condition assessment of the public sewers, highway drains and culvert Additional road gullies Storm water storage?

- Carl Hodgson was previously investigating the possibility of a storm water detention basin near the Bowes Railway line access road at the top of Grange Terrace.
- However the Environment Agency has commenced a detailed study (jointly with Gateshead Council) for the management surface water as part of a larger scale scheme to reduce flood risk on the Team Valley.