

DRAINAGE AND WASTEWATER MANAGEMENT PLANS (DWMP)



# LEVEL 2 STRATEGIC PLANNING AREA SUMMARY – NORTHUMBERLAND

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## OVERVIEW

The Drainage and Wastewater Management Plan (DWMP) covers seven Strategic Planning Areas (SPA). The seven areas align broadly with the river basin catchments within the region and the main urban areas.

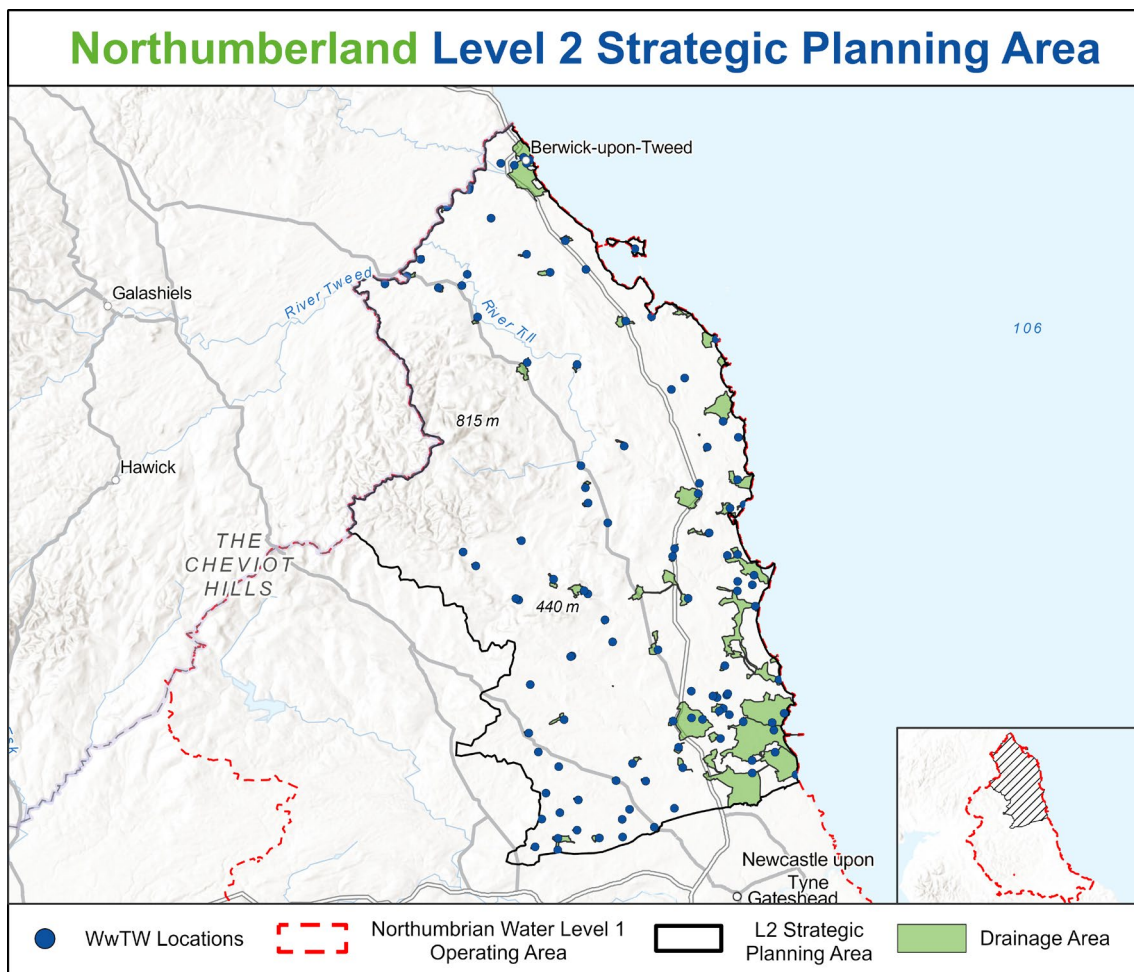
This document provides an overview of the DWMP for the **Northumberland Level 2 SPA**.

Within the Northumberland Level 2 SPA, there are:

- 100 Wastewater Treatment Works (WwTW)
- 103 Level 3 Tactical Planning Unit (TPU) areas
- 110 Wastewater Drainage Areas

The total estimated population of the Northumberland Level 2 SPA is 231,850.

### NORTHUMBRLAND LEVEL 2 STRATEGIC PLANNING AREA



## DRAINAGE AREAS WITHIN NORTHUMBERLAND L2 SPA

The following table outlines all of the drainage areas within the Northumberland Level 2 SPA. The table also outlines whether the drainage area triggered during the Risk Based Catchment Screening (RBCS) stage of the DWMP for detailed analysis as part of the Baseline Risk and Vulnerability Assessment (BRAVA) stage.

Drainage Area Reference	Drainage Area Name	WwTW Name	Triggered BRAVA?
01-D01	Alnwick	Alnwick WwTW	Yes
01-D02	Amble & Warkworth	Amble WwTW	Yes
01-D03	Shilbottle	Shilbottle WwTW	Yes
01-D04	Acklington & Togston	Togston WwTW	Yes
01-D05	Felton	Felton WwTW	Yes
01-D06	Newton on the Moor	Newton On The Moor WwTW	Yes
01-D07	Radcliffe	Radcliffe WwTW	No
01-D08	Hampeth	Whittle Colliery WwTW	No
01-D09	Rothbury	Rothbury WwTW	Yes
01-D10	Thropton	Thropton And Snitter WwTW	Yes
01-D11	Whittingham	Whittingham WwTW	Yes
01-D12	Powburn	Powburn WwTW	Yes
01-D13	Eglington	Eglington WwTW	Yes
01-D14	Harbottle	Harbottle WwTW	No
01-D15	Glanton	Glanton WwTW	Yes
01-D17	Hepple	Hepple WwTW	No
01-D18	Netherton	Netherton WwTW	Yes
01-D19	Alwinton	Alwinton WwTW	No
01-D20	Wingates	Wingates WwTW	No
01-D21	Harwood	Harwood Forest WwTW	No
01-D22	Embleton Terrace	The Lee Rothbury WwTW	No
01-D23	Snitter	Snitter WwTW	No
01-D24	Thrunton Brick Works	Thrunton WwTW	No
01-D25	Longhoughton & Boulmer	Boulmer WwTW	Yes
01-D26	Lesbury	Alnmouth WwTW	Yes
01-D27	Embleton	Embleton WwTW	Yes
01-D28	Denwick	Denwick WwTW	No
01-D29	Craster South	Craster South Acres WwTW	Yes
01-D30	Dunstan	Dunstan WwTW	Yes
01-D31	Rennington	Rennington WwTW	Yes
01-D32	Alnmouth	Alnmouth WwTW	Yes
01-D33	Craster North	Craster Dunstanburgh Rd WwTW	No
01-D34	Whiteadder	Whiteadder WwTW	No

Drainage Area Reference	Drainage Area Name	WwTW Name	Triggered BRAVA?
01-D35	Berwick	Berwick Upon Tweed WwTW	Yes
01-D36	Wooler	Wooler WwTW	Yes
01-D37	Millfield	Milfield WwTW	Yes
01-D38	Chatton	Chatton WwTW	Yes
01-D39	Cornhill on Tweed	Cornhill WwTW	Yes
01-D40	Branxton	Branxton WwTW	Yes
01-D41	Wark	Wark On Tweed WwTW	No
01-D42	Etal	Etal WwTW	Yes
01-D43	Crookham	Crookham WwTW	Yes
01-D44	Donaldsons Lodge	Donaldsons Lodge WwTW	No
01-D45	Seahouses	Seahouses WwTW	Yes
01-D46	Belford	Belford WwTW	Yes
01-D47	Beadnell	Seahouses WwTW	Yes
01-D48	Bamburgh	Seahouses WwTW	Yes
01-D49	Ellingham	Ellingham WwTW	Yes
01-D50	Belford Industrial Estate	Belford WwTW	Yes
01-D51	Norham	Norham WwTW	Yes
01-D52	Lowick	Lowick WwTW	Yes
01-D53	Horncliffe North	Horncliffe North WwTW	Yes
01-D54	Horncliffe South	Horncliffe South WwTW	No
01-D55	Holy Island	Holy Island WwTW	No
01-D56	Bowsden	Bowsden WwTW	Yes
01-D57	Shoresdean	Shoresdean WwTW	No
01-D58	Fenwick	Fenwick WwTW	No
01-D59	Haggerston	Haggerston Castle WwTW	Yes
01-D60	Longhorsley	Longhorsley WwTW	Yes
01-D61	Togston Hall	Togston Hall WwTW	No
01-D63	Alwinton West	Alwinton West WwTW	No
01-D64	Berwick Bowling Club	Berwick Bowling Club WwTW	No
01-D65	Bridge Terrace	Bridge Terrace WwTW	No
01-D66	Castlegate	Castlegate WwTW	No
01-D67	Warren Mill	Waren Mill WwTW	No
01-D68	Foxton Hall	Foxton Hall WwTW	No
01-D69	Old Helsay	Old Helsay WwTW	No
01-D70	Rock	Rock WwTW	Yes
01-D71	CHATHILL	Chathill WwTW	No
02-D01	Blyth	Blyth WwTW	Yes
02-D02	Cramlington	Cramlington WwTW	Yes
02-D03	Horton Road	Bedlington Bank WwTW	No
02-D13	Morpeth	Morpeth WwTW	Yes

Drainage Area Reference	Drainage Area Name	WwTW Name	Triggered BRAVA?
02-D14	Mitford	Mitford WwTW	No
02-D15	Ulgham	Ulgham WwTW	Yes
02-D16	Broomhill	Lynemouth WwTW	Yes
02-D17	Lyneburn Valley	Lynemouth WwTW	Yes
02-D18	Cresswell	Lynemouth WwTW	Yes
02-D19	Berwick Hill	Berwick Hill WwTW	No
02-D20	Stannington Station	Cramlington WwTW	Yes
02-D21	Hepscott	Hepscott WwTW	Yes
02-D22	Pegswood	Pegswood WwTW	Yes
02-D23	Longhirst	Longhirst Village WwTW	No
02-D24	Miners Homes, Longhirst	Longhirst Colliery 1 WwTW	No
02-D25	St Marys Hospital	Stannington St Marys WwTW	Yes
02-D26	Gubeon Wood, Tranwell	Tranwell WwTW	No
02-D28	Rose Cottage, Longhirst	Longhirst Colliery 2 WwTW	No
02-D29	Stamfordham	Stamfordham WwTW	No
02-D30	Whalton	Whalton WwTW	No
02-D31	Matfen	Matfen WwTW	No
02-D32	Belsay	Belsay WwTW	Yes
02-D33	Scots Gap & Cambo	Scots Gap WwTW	No
02-D34	Ogle	Ogle WwTW	No
02-D35	Ingoe	Ingoe WwTW	No
02-D36	Capheaton	Capheaton WwTW	No
02-D37	Fenwick	Fenwick Castle Morpeth WwTW	Yes
02-D38	Milbourne	Milbourne Village North WwTW	No
02-D39	Wallridge	Wallridge WwTW	No
02-D40	Kirkheaton	Kirkheaton WwTW	No
02-D41	Dalton	Dalton WwTW	No
02-D42	Ryal	Ryal WwTW	No
02-D43	Kirkwhelpington	Kirkwhelpington WwTW	Yes
02-D44	Kirkharle	Kirkharle WwTW	No
02-D45	Ashington	Newbiggin WwTW	Yes
02-D46	Bedlington & Cambois	Cambois WwTW	Yes
02-D49	Bothal	Bothal WwTW	No
02-D50	Hebron	Hebron WwTW	Yes
02-D51	Collingwood Cottages	Ponteland WwTW	No
02-D52	Netherwitton	Netherwitton WwTW	No
03-D68	Great Whittington	Great Whittington WwTW	Yes

**KEY STAKEHOLDERS**

It is widely recognised and acknowledged that drainage systems are complex and have numerous interactions, both known and unknown. It was therefore important that the DWMP was not created solely by Northumbrian Water. While NWL have been tasked with the delivery of the DWMP, it was critical that the public and relevant stakeholders actively participated and offered support in its creation. We have worked with a range of relevant stakeholders in the production of the DWMP, including the Environment Agency (EA), Lead Local Flood Authorities, Local Planning Authorities, housing developers and environmental partners.

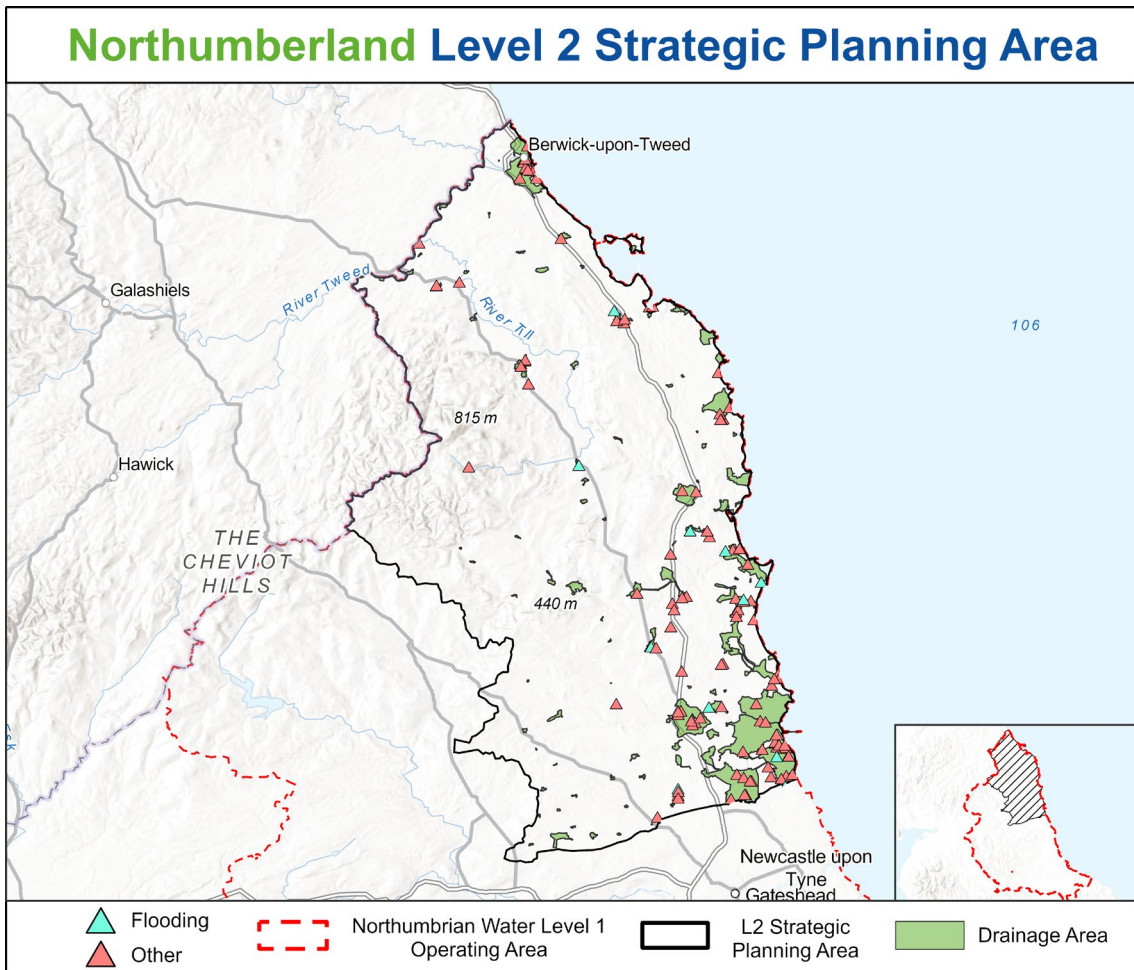
Through different partnerships and strategies, we play an active role within the region, working collaboratively with stakeholders on several projects. The DWMP builds on the strong foundation of the Northumbria Integrated Drainage Partnership (NIDP), which consists of 14 Lead Local Flood Authorities, the EA and Northumbrian Water. One of the aims of the NIDP is to identify opportunities to deliver surface water management schemes within catchments to reduce the risk and impact of flooding. Catchments are taken from the investigation stages where opportunity areas are identified, through to the outline business case stage to determine funding sources, and ultimately through to scheme delivery. The award-winning partnership approach, which is based around collaboration to identify priority investment areas where benefits can be delivered for multiple stakeholders, provides an excellent platform for the DWMP.

To ensure that existing and future opportunities for working collaboratively with stakeholders were included in the production of the DWMP, engagement sessions were held in March 2023. During these sessions, all the geographical areas covered by the DWMP were reviewed to identify, record and map ongoing and future opportunities.

Key Stakeholders
Environment Agency Local Authorities National Farmers Union Rivers Trusts Natural England Developers National Parks



**Collaborative Working Opportunities**



**Significant Collaborative Working Opportunities**

Drainage Area Reference	Organisation	Opportunity Type
01-D05	Northumbria Integrated Drainage Partnership (NIDP)	Northumbria Integrated Drainage Partnership Study to start in 2023.
01-D35	Northumbria Integrated Drainage Partnership (NIDP)	Northumbria Integrated Drainage Partnership 2026-2027 in the north, Flood and Coastal Risk Management Programme August 2021.
01-D36	Northumbria Integrated Drainage Partnership (NIDP)	Environment Programme Pipeline Projects 2023-2028, Flood and Coastal Risk Management Programme August 2021
02-D46	Northumbria Integrated Drainage Partnership (NIDP)	Environment Programme Pipeline Projects 2023-2028, Northumbria Integrated Drainage Partnership.



## CATCHMENT NEEDS

Through the Baseline Risk and Vulnerability Assessment (BRAVA) and Problem Characterisation stages of the DWMP, the requirements for investment within catchments were identified.

The following summaries provide the detail of the 'Catchment Needs' that have been identified within the Northumberland Level 2 SPA.

### Storm Overflow Discharge Reduction Plan

The following table summarises the number of storm overflows within the Northumberland Level 2 SPA and how many have been included in the DWMP for improvement in line with the Storm Overflow Discharge Reduction Plan (SODRP).

Storm Overflow Categorisation	Count	Storm Overflows Requiring Improvement
Inland – High Priority	75	65
Inland – Not High Priority	103	73
Bathing Water	34	25
Coastal / Estuarine (not linked to Bathing Water)	22	17
<b>Total</b>	<b>234</b>	<b>180</b>

### Storm Overflow Screening

Under the SODRP, all storm overflows are required to include 6mm screening provision on any discharges that are made.

The following table summarises the number of storm overflows within the Northumberland Level 2 SPA that have been included in the DWMP for the provision of 6mm screening.

Storm Overflow Categorisation	Count	Storm Overflows Requiring Screening
Inland – High Priority	75	38
Inland – Not High Priority	103	61
Bathing Water	34	25
Coastal / Estuarine (not linked to Bathing Water)	22	9
<b>Total</b>	<b>234</b>	<b>133</b>

The full list of storm overflows within the Northumberland Level 2 SPA is included in the following table.

Storm Overflow Site Name	Drainage Area Code	Drainage Area Name	Storm Overflow Spill Frequency Reduction Scheme - Delivery Period
ALNWICK CASTLE CSO A011	01-D01	Alnwick	2030 - 2035
HOWLING LANE CSO A046	01-D01	Alnwick	2030 - 2035
ALNWICK SEWAGE TREATMENT WORKS	01-D01	Alnwick	2035 - 2040
ALNWICK SEWAGE TREATMENT WORKS	01-D01	Alnwick	2035 - 2040
ALNMOUTH ROAD SSO	01-D01	Alnwick	2035 - 2040
ALNWICK CASTLE CSO NO 2 A035	01-D01	Alnwick	2035 - 2040
NARROWGATE CSO	01-D01	Alnwick	2035 - 2040
ALNWICK GARDENS CSO	01-D01	Alnwick	No Improvement Required
STAIGS GARTH SPS	01-D01	Alnwick	No Improvement Required
PUMPING STATION NO4 BEAL BANK	01-D02	Amble & Warkworth	2030 - 2035
HIGH HAUXLEY PS	01-D02	Amble & Warkworth	2030 - 2035
A1068 ROAD BRIDGE CSO	01-D02	Amble & Warkworth	2030 - 2035
AMBLE WASTE WATER TREATMENT WORKS	01-D02	Amble & Warkworth	2040 - 2045
TURNER STREET SPS	01-D02	Amble & Warkworth	2040 - 2045
AMBLE HARBOUR PUMPING STATION	01-D02	Amble & Warkworth	2040 - 2045
WARKWORTH PUMPING STATION NO3 WOODLANDS	01-D02	Amble & Warkworth	2040 - 2045
SWARLAND HOUSE SPS	01-D02	Amble & Warkworth	No Improvement Required
LOW HAUXLEY PS	01-D02	Amble & Warkworth	No Improvement Required
WARKWORTH SEWERAGE SYSTEM SSO MH NO St Lawrence Court	01-D02	Amble & Warkworth	No Improvement Required
SHILBOTTLE SEWAGE TREATMENT WORKS	01-D03	Shilbottle	2035 - 2040
SHILBOTTLE CSO NO. 2 A015	01-D03	Shilbottle	2035 - 2040
SHILBOTTLE CSO A GRANGE ROAD	01-D03	Shilbottle	2035 - 2040
SHILBOTTLE CSO FAIRFIELD VIEW	01-D03	Shilbottle	No Improvement Required
TOGSTON SEWAGE TREATMENT WORKS	01-D04	Acklington & Togston	2040 - 2045
NEW HALL FARM CSO	01-D05	Felton	2025 - 2030

Storm Overflow Site Name	Drainage Area Code	Drainage Area Name	Storm Overflow Spill Frequency Reduction Scheme - Delivery Period
FELTON STW CSO Storm Tank	01-D05	Felton	2025 - 2030
MAIN STREET CSO	01-D05	Felton	2025 - 2030
FELTON RECREATION GROUND CSO	01-D05	Felton	2025 - 2030
FELTON STW CSO INLET	01-D05	Felton	2025 - 2030
SWARLAND FENCE PUMPING STATION	01-D05	Felton	2045 - 2050
SWARLAND OLD SEWAGE WORKS CSO	01-D05	Felton	2045 - 2050
LONGFRAMLINGTON SSO OLD HALL	01-D05	Felton	2045 - 2050
LANEHEAD PUMPING STATION	01-D05	Felton	2045 - 2050
WHITTLE COLLIERY VILLAGE STW	01-D08	Hampeth	No Improvement Required
STEPPING STONES CSO	01-D09	Rothbury	2040 - 2045
ROTHBURY SEWAGE TREATMENT WORKS	01-D09	Rothbury	No Improvement Required
THROPTON CSO	01-D10	Thropton	2035 - 2040
WHITTINGHAM STW	01-D11	Whittingham	2045 - 2050
ALN BANK CSO	01-D11	Whittingham	No Improvement Required
POWBURN SEWAGE TREATMENT WORKS	01-D12	Powburn	2045 - 2050
EGLINGHAM STW	01-D13	Eglingham	2045 - 2050
HARBOTTLE SEWAGE TREATMENT WORKS	01-D14	Harbottle	2040 - 2045
HEPPLE SEWAGE TREATMENT WORKS	01-D17	Hepple	No Improvement Required
NETHERTON SEWAGE TREATMENT WORKS	01-D18	Netherton	2035 - 2040
NETHERTON CSO	01-D18	Netherton	2035 - 2040
Alwinton STW	01-D19	Alwinton	2035 - 2040
Alwinton STW	01-D19	Alwinton	No Improvement Required
THROPTON & SNITTER STW	01-D23	Snitter	2035 - 2040
BOULMER SEWAGE TREATMENT WORKS	01-D25	Longhoughton & Boulmer	2040 - 2045
RAF BOULMER SEWAGE PUMPING STATION	01-D25	Longhoughton & Boulmer	2040 - 2045

Storm Overflow Site Name	Drainage Area Code	Drainage Area Name	Storm Overflow Spill Frequency Reduction Scheme - Delivery Period
LESBURY (STEPPY LANE) PUMPING STATI	01-D26	Lesbury	2030 - 2035
AVONDALE CSO	01-D26	Lesbury	2030 - 2035
STEPPEY LANE CSO A020	01-D26	Lesbury	2045 - 2050
LESBURY(HIPSBURN)CSO	01-D26	Lesbury	No Improvement Required
EMBLETON SEWAGE WORKS CSO	01-D27	Embleton	2035 - 2040
CHRISTON BANK SPS	01-D27	Embleton	2035 - 2040
SEA LANE PUMPING STATION EMBLETON LOW MILL	01-D27	Embleton	No Improvement Required
CRASTER SOUTH SPS	01-D29	Craster South	2040 - 2045
HEUGH ROAD PUMPING STATION	01-D29	Craster South	2040 - 2045
JOLLY FISHERMAN CSO	01-D29	Craster South	No Improvement Required
DUNSTAN SEWAGE TREATMENT WORKS	01-D30	Dunstan	2040 - 2045
RENNINGTON PUMPING STATION	01-D31	Rennington	2045 - 2050
ALNMOUTH P STATION	01-D32	Alnmouth	2035 - 2040
CRASTER NORTH SPS	01-D33	Craster North	2035 - 2040
QUEENS GARDENS CSO	01-D35	Berwick	2025 - 2030
RAILWAY STREET	01-D35	Berwick	2025 - 2030
CASTLE TERRACE 1 CSO	01-D35	Berwick	2025 - 2030
SSO AT WEST END	01-D35	Berwick	2025 - 2030
CSO AT BLAKEWELL ROAD	01-D35	Berwick	2025 - 2030
BERWICK STW	01-D35	Berwick	2025 - 2030
QUAY WALL SPS SANDGATE CSO	01-D35	Berwick	2025 - 2030
SHOREGATE CSO	01-D35	Berwick	2025 - 2030
PALACE STREET NORTH CSO 2	01-D35	Berwick	2025 - 2030
PALACE STREET NORTH CSO 1	01-D35	Berwick	2025 - 2030
BERWICK NO 4 SEWAGE PUMPING STATION	01-D35	Berwick	2025 - 2030



Storm Overflow Site Name	Drainage Area Code	Drainage Area Name	Storm Overflow Spill Frequency Reduction Scheme - Delivery Period
SPITTAL QUAY CSO (BT7)	01-D35	Berwick	2025 - 2030
CAR PARK CSO	01-D35	Berwick	2025 - 2030
BRANDYWELL CSO	01-D35	Berwick	2025 - 2030
MOUNT ROAD CSO BT003	01-D35	Berwick	2025 - 2030
TOWER ROAD CSO	01-D35	Berwick	2025 - 2030
33 DOCK ROAD CSO	01-D35	Berwick	2025 - 2030
DOCK ROAD CSO (BT44)	01-D35	Berwick	2025 - 2030
TWEEDSIDE INDUSTRIAL ESTATE CSO	01-D35	Berwick	2030 - 2035
SCREMERSTON NO 1 SPS	01-D35	Berwick	2035 - 2040
SCREMERSTON NO 2 SPS	01-D35	Berwick	2035 - 2040
MILLFIELD SPS	01-D35	Berwick	2035 - 2040
MAGDALENE FIELDS NORTH CSO M2 monitoring point	01-D35	Berwick	2035 - 2040
MAGDALENE FIELDS NORTH CSO High level M3 monitoring point	01-D35	Berwick	2035 - 2040
MAGDALEN FIELDS SOUTH COMBINED SEWW	01-D35	Berwick	2035 - 2040
BERWICK P S NO 7 (MAGDALENE FIELDS)	01-D35	Berwick	2035 - 2040
JNC CHURCH ROAD/DOCK ROAD CSO	01-D35	Berwick	2035 - 2040
MILL STRAND COMBINED SEWER OVERFLOW	01-D35	Berwick	2035 - 2040
DERWENT WATER TERRACE CSO BT022	01-D35	Berwick	2035 - 2040
BT41 MAIN STREET NO 4 CSO	01-D35	Berwick	2040 - 2045
CASTLE VALE SPS	01-D35	Berwick	No Improvement Required
RAVENSLOWNE BARRACKS SPS	01-D35	Berwick	No Improvement Required
CASTLE TERRACE NO2 (BT341) CSO	01-D35	Berwick	No Improvement Required
WESTFIELD NO 9 PS	01-D35	Berwick	No Improvement Required
MAIN STREET SPITTAL CSO	01-D35	Berwick	No Improvement Required
SEA ROAD CSO	01-D35	Berwick	No Improvement Required

Storm Overflow Site Name	Drainage Area Code	Drainage Area Name	Storm Overflow Spill Frequency Reduction Scheme - Delivery Period
WOOLER STW	01-D36	Wooler	2025 - 2030
SOUTH ROAD NO 18 CSO	01-D36	Wooler	2025 - 2030
CHURCH STREET CSO	01-D36	Wooler	2025 - 2030
WOOLER SPS	01-D36	Wooler	2040 - 2045
WOOLER CSO	01-D36	Wooler	2040 - 2045
MILFIELD SEWAGE TREATMENT WORKS	01-D37	Millfield	2040 - 2045
MILFIELD CSO	01-D37	Millfield	2040 - 2045
CHATTON STW	01-D38	Chatton	2035 - 2040
CHATTON CSO	01-D38	Chatton	2035 - 2040
MAIN STREET CSO	01-D39	Cornhill on Tweed	2040 - 2045
CORNHILL SPS	01-D39	Cornhill on Tweed	2040 - 2045
BRANXTON STW	01-D40	Branxton	2045 - 2050
CSO MAIN STREET	01-D40	Branxton	No Improvement Required
WARK SEWAGE TREATMENT WORKS	01-D41	Wark	2035 - 2040
ETAL STW	01-D42	Etal	2035 - 2040
CROOKHAM STW	01-D43	Crookham	No Improvement Required
HARBOUR SPS	01-D45	Seahouses	2030 - 2035
MITCHELL AVENUE SEWAGE PUMPING STAN	01-D45	Seahouses	2040 - 2045
KING STREET SEWAGE PUMPING STATION	01-D45	Seahouses	2040 - 2045
ST AIDANS SEWAGE PUMPING STATION	01-D45	Seahouses	No Improvement Required
SOUTHFIELD CSO	01-D45	Seahouses	No Improvement Required
MCLAREN DRIVE CSO HALL LODGE	01-D46	Belford	2035 - 2040
BELFORD SEWAGE TREATMENT WORKS CSO INLET	01-D46	Belford	2035 - 2040
BELFORD SEWAGE TREATMENT WORKS CSO Storm Tank	01-D46	Belford	2035 - 2040
BEADNELL CAR PARK SEWAGE PUMPING SN	01-D47	Beadnell	2030 - 2035

Storm Overflow Site Name	Drainage Area Code	Drainage Area Name	Storm Overflow Spill Frequency Reduction Scheme - Delivery Period
BEADNELL HARBOUR SEWAGE PUMPING STN	01-D47	Beadnell	2030 - 2035
BEADNELL(SWINHOE ROAD) SEWAGE PUMP	01-D47	Beadnell	No Improvement Required
BAMBURGH SEWAGE PUMPING STATION RED BARN	01-D48	Bamburgh	2030 - 2035
ELLINGHAM STW	01-D49	Ellingham	2045 - 2050
BELFORD INDUSTRIAL ESTATE PS.	01-D50	Belford Industrial Estate	No Improvement Required
NORHAM SEWAGE TREATMENT WORKS	01-D51	Norham	2035 - 2040
LOWICK SEWAGE TREATMENT WORKS CSO INLET	01-D52	Lowick	2040 - 2045
LOWICK SEWAGE TREATMENT WORKS Storm Tank	01-D52	Lowick	2040 - 2045
KYLOE VIEW SSO	01-D52	Lowick	2040 - 2045
HORNCLIFFE NORTH STW No 1	01-D53	Horncliffe North	2030 - 2035
HORNCLIFFE NORTH STW No 2	01-D53	Horncliffe North	2030 - 2035
HOLY ISLAND STW	01-D55	Holy Island	No Improvement Required
CSO INLET AT BOWSDEN SEWAGE TREATM	01-D56	Bowden	2040 - 2045
FENWICK (BERWICK) STW	01-D58	Fenwick	2045 - 2050
HAGGERSTON CASTLE CARAVAN PARK STW	01-D59	Haggerston	2035 - 2040
LONGHORSLEY STW	01-D60	Longhorsley	2045 - 2050
COWPEN ROAD CSO	02-D01	Blyth	2030 - 2035
BRIARDALE ROAD CSO	02-D01	Blyth	2030 - 2035
JOHN STREET CSO	02-D01	Blyth	2030 - 2035
BATES COLLIERY SPS	02-D01	Blyth	2030 - 2035
BLYTH NO6 SPS	02-D01	Blyth	2030 - 2035
BLYTH NO5 SPS	02-D01	Blyth	2030 - 2035
BEDSIDE CSO	02-D01	Blyth	2030 - 2035
BLYTH (NEW) SEWAGE TREATMENT WORKS	02-D01	Blyth	2030 - 2035
CRAMLINGTON SEWAGE TREATMENT WORKS CSO INLET	02-D01	Blyth	2030 - 2035

Storm Overflow Site Name	Drainage Area Code	Drainage Area Name	Storm Overflow Spill Frequency Reduction Scheme - Delivery Period
CRAMLINGTON SEWAGE TREATMENT WORKS Storm Tank	02-D01	Blyth	2030 - 2035
SOLINGEN ESTATE CSO	02-D01	Blyth	2030 - 2035
SOUTH BLYTH HARBOUR CSO	02-D01	Blyth	2030 - 2035
BRIARDALE ROAD CSO TAYLOR STREET	02-D01	Blyth	2040 - 2045
HUGHBOURNE STREET CSO	02-D01	Blyth	2040 - 2045
RIDLEY STREET SPS	02-D01	Blyth	No Improvement Required
BLYTH NO 2 PS LINKS ROAD	02-D01	Blyth	No Improvement Required
BEVAN HOUSE DENT STREET	02-D01	Blyth	No Improvement Required
NELSON VILLAGE CSO	02-D02	Cramlington	2035 - 2040
KLONDYKE CSO	02-D02	Cramlington	2035 - 2040
STANNINGTON VILLAGE PUMPING STATION	02-D02	Cramlington	2035 - 2040
EAST HARTFORD PS	02-D02	Cramlington	2035 - 2040
HARTFORD BRIDGE SEWAGE PUMPING STAN	02-D02	Cramlington	No Improvement Required
STOBS FORD SPS	02-D13	Morpeth	2030 - 2035
MORPETH SEWAGE TREATMENT WORKS Storm Tank	02-D13	Morpeth	2030 - 2035
BENNETTS WALK CSO	02-D13	Morpeth	2035 - 2040
POINT A DAMSIDE CSO CM022	02-D13	Morpeth	2035 - 2040
ELDER COTTAGES CSO	02-D13	Morpeth	2035 - 2040
MAFEKING COMBINED SEWER OVERFLOW	02-D13	Morpeth	2035 - 2040
POINT M ST JAMES CHURCH CSO	02-D13	Morpeth	2035 - 2040
DAMSIDE AND STAITHES LANE CSO	02-D13	Morpeth	2035 - 2040
THE KYLINS COMBINED SEWER OVERFLOW	02-D13	Morpeth	No Improvement Required
SUNN INN CSO	02-D13	Morpeth	No Improvement Required
STOREY PARK CSO	02-D13	Morpeth	No Improvement Required
MORPETH CSO E CASTLE SQUARE	02-D13	Morpeth	No Improvement Required



Storm Overflow Site Name	Drainage Area Code	Drainage Area Name	Storm Overflow Spill Frequency Reduction Scheme - Delivery Period
MORPETH CSO D TENTER TERRACE	02-D13	Morpeth	No Improvement Required
MORPETH SEWAGE TREATMENT WORKS INLET CSO	02-D13	Morpeth	No Improvement Required
ULGHAM SEWAGE TREATMENT WORKS	02-D15	Ulgham	2045 - 2050
HADSTON SEWAGE PUMPING STATION THE LADY BURN	02-D16	Broomhill	2030 - 2035
RED ROW SEWAGE PUMPING STATION	02-D16	Broomhill	2045 - 2050
THE GABLES CSO	02-D16	Broomhill	No Improvement Required
SEA VIEW CSO	02-D17	Lyneburn Valley	2030 - 2035
LYNE CSO CM045	02-D17	Lyneburn Valley	2030 - 2035
FIFTH ROW CSO	02-D17	Lyneburn Valley	2045 - 2050
DENE HOUSE SPS	02-D17	Lyneburn Valley	2045 - 2050
LYNEMOUTH STW	02-D17	Lyneburn Valley	2045 - 2050
29 FIRST ROW	02-D17	Lyneburn Valley	2045 - 2050
LINTON PS	02-D17	Lyneburn Valley	No Improvement Required
WIDDRINGTON CSO	02-D17	Lyneburn Valley	No Improvement Required
CRESSWELL SEWAGE PUMPING STATION	02-D18	Cresswell	2030 - 2035
NETHERTON PARK SPS	02-D20	Stannington Station	2045 - 2050
HEPSCOTT SEWAGE TREATMENT WORKS	02-D21	Hepscott	2045 - 2050
BOTHAL CSO THE TUNNELS CM036	02-D22	Pegswood	2035 - 2040
PEGSWOOD STW	02-D22	Pegswood	2035 - 2040
PEGSWOOD CSOCOUNTY FIRST SCHOOL	02-D22	Pegswood	2035 - 2040
LONGHIRST STW	02-D23	Longhirst	No Improvement Required
ST MARYS SEWAGE PUMPING STATION	02-D25	St Marys Hospital	2045 - 2050
STAMFORDHAM CSO	02-D29	Stamfordham	2040 - 2045
STAMFORDHAM SEWAGE TREATMENT WORKS	02-D29	Stamfordham	2040 - 2045
BRIDGE END PS	02-D29	Stamfordham	No Improvement Required

Storm Overflow Site Name	Drainage Area Code	Drainage Area Name	Storm Overflow Spill Frequency Reduction Scheme - Delivery Period
WHALTON STW	02-D30	Whalton	No Improvement Required
SCOTS GAP STW	02-D33	Scots Gap & Cambo	No Improvement Required
OGLE SEWAGE TREATMENT WORKS	02-D34	Ogle	No Improvement Required
WALLRIDGE SEWAGE DISPOSAL WORKS	02-D39	Wallridge	No Improvement Required
NORTH SEATON LEVEL CROSSING CSO	02-D45	Ashington	2030 - 2035
SEATON NORTH HOTEL CSO (WK013)	02-D45	Ashington	2030 - 2035
NEWBIGGIN SEWAGE TREATMENT WORKS	02-D45	Ashington	2030 - 2035
ASHINGTON CSO PARK ROAD WK 006	02-D45	Ashington	2040 - 2045
GREEN LANE CSO 9(WK 008)	02-D45	Ashington	2040 - 2045
NEWBIGGIN SEWAGE TREATMENT WORKS	02-D45	Ashington	2040 - 2045
LYNDHURST ROAD CSO	02-D45	Ashington	2040 - 2045
BOTHAL COTTAGES	02-D45	Ashington	No Improvement Required
20 WANSBECK STREET NORTH SEATON	02-D45	Ashington	No Improvement Required
PARK ROAD & GREEN LANE CSO	02-D45	Ashington	No Improvement Required
SOUTH GREEN LANE CSO	02-D45	Ashington	No Improvement Required
NEWBIGGIN SSO (WILKIE TERRACE)	02-D45	Ashington	No Improvement Required
CLEASEWELL HILL SPS	02-D46	Bedlington & Cambois	2025 - 2030
EAST FORD ROAD PS	02-D46	Bedlington & Cambois	2025 - 2030
GLAXO WEST CSO	02-D46	Bedlington & Cambois	2025 - 2030
BANK TOP CSO	02-D46	Bedlington & Cambois	2025 - 2030
GRANGE PARK CSO (WK016)	02-D46	Bedlington & Cambois	2025 - 2030
SLEEKBURN EAST CSO	02-D46	Bedlington & Cambois	2025 - 2030
NORTH BLYTH PUMPING STATION	02-D46	Bedlington & Cambois	2025 - 2030
ASHINGTON DRIVE CSO HLF MOON RNBWTT	02-D46	Bedlington & Cambois	2030 - 2035
NEDDERTON CSO BEDLINGTON	02-D46	Bedlington & Cambois	2035 - 2040

Storm Overflow Site Name	Drainage Area Code	Drainage Area Name	Storm Overflow Spill Frequency Reduction Scheme - Delivery Period
BRIARDALE CSO	02-D46	Bedlington & Cambois	2035 - 2040
WILLOW BRIDGE CSO	02-D46	Bedlington & Cambois	2035 - 2040
WEST SLEEKBURN FARM CSO	02-D46	Bedlington & Cambois	2035 - 2040
WELWYN FACTORY CSO	02-D46	Bedlington & Cambois	2035 - 2040
FRONT STREET CSO CH68	02-D46	Bedlington & Cambois	2035 - 2040
MILLFIELD CSO	02-D46	Bedlington & Cambois	2035 - 2040
NORTH CAMBOIS PUMPING STATION	02-D46	Bedlington & Cambois	No Improvement Required
CAMBOIS SEWAGE TREATMENT WORKS	02-D46	Bedlington & Cambois	No Improvement Required
WARSDHELL STREET PUMPING STATION	02-D46	Bedlington & Cambois	No Improvement Required

## Wastewater Treatment Works Compliance

Analyses have been completed to determine the interventions that are likely to be required to ensure all wastewater treatment works (WwTW) are operating in compliance with the permits for dry weather flow (DWF) treatment and treated effluent discharge quality.

The following table summarises the number of WwTWs within the Northumberland Level 2 SPA that have been included in the DWMP for DWF permit compliance and treated effluent discharge quality permit compliance (phosphorous (P), biological oxygen demand (BOD) and ammonia (Amm) indicators).

WwTW Name	Intervention(s) Required
Alnmouth WwTW	Alnmouth WwTW has been identified as requiring a dry weather flow compliance upgrade between 2055 and 2060.
Alnwick WwTW	Alnwick WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.
Amble WwTW	Amble WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous and Ammonia between 2025 and 2030.
Belford WwTW	Belford WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Biological Oxygen Demand and Ammonia between 2025 and 2030.
Berwick WwTW	Berwick WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.
Embleton WwTW	Embleton WwTW is being investigated/upgraded currently for dry weather flow compliance. An investigation for discharge quality compliance has been identified for Ammonia between 2025 and 2030.
Felton WwTW	Felton WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.
Haggerston Castle WwTW	Haggerston Castle WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.
Hepscott WwTW	Hepscott WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.
Longhorsley WwTW	Longhorsley WwTW has been identified as requiring a dry weather flow compliance upgrade between 2030 and 2040. An investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.
Lowick WwTW	Lowick WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous, Biological Oxygen Demand and Ammonia between 2025 and 2030.
Lynemouth WwTW	Lynemouth WwTW has been identified as requiring a dry weather flow compliance upgrade between 2045 and 2050.
Matfen WwTW	Matfen WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.
Morpeth WwTW	Morpeth WwTW is being investigated/upgraded currently for dry weather flow compliance. An investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.



WwTW Name	Intervention(s) Required
Pegswood WwTW	Pegswood WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous, Biological Oxygen Demand and Ammonia between 2025 and 2030.
Powburn WwTW	Powburn WwTW is being investigated/upgraded currently for dry weather flow compliance.
Rothbury WwTW	Rothbury WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.
Shilbottle WwTW	Shilbottle WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.
Stamfordham WwTW	Stamfordham WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.
Thropton And Snitter WwTW	Thropton And Snitter WwTW has been identified as requiring a dry weather flow compliance upgrade between 2030 and 2035. An investigation for discharge quality compliance has been identified for Phosphorous and Ammonia between 2025 and 2030.
Ulgham WwTW	Ulgham WwTW is being investigated/upgraded currently for dry weather flow compliance. An investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.
Whalton WwTW	Whalton WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.
Whittingham WwTW	Whittingham WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.
Wooler WwTW	Wooler WwTW has been identified as requiring an investigation for discharge quality compliance has been identified for Phosphorous between 2025 and 2030.

### Long-Term Delivery Strategy for Flooding and Pollution

The National Infrastructure Commission’s report ‘Reducing the risk of surface water flooding’<sup>1</sup> highlighted the importance of a national approach to tackle flooding, and the costs and challenges of eliminating sewer flooding. Given this, and the greater insight we have gained from developing the DWMP, the ambition for flooding and pollution risk has been adjusted to what is considered a stretching but achievable level that would be economically beneficial to deliver.

Our Long-Term Delivery Strategy identifies a target of reducing sewer flooding by 60% from our 2025 position. To achieve this, we will plan to reduce hydraulic flood risk regionally in the period between 2030 and 2050 by a total of:

- 17,999 internal flood risk properties
- 216,074 external flood risk properties

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<sup>1</sup> <https://nic.org.uk/studies-reports/reducing-the-risks-of-surface-water-flooding/surface-water-flooding-final-report/>

This approach deals with the impact of climate change, growth and urban creep.

The following table summarises the level of risk within the Northumberland L2 SPA against the flooding and pollution planning objectives.

Planning Objective	Measure	Count				
		2020	2025	2030	2045	2060
PO1 – Internal Flood Risk	Count of properties at risk of flooding internally during a 1 in 20 year return period rainfall event	1,699	1,700	1,712	2,635	3,119
PO2 – External Flood Risk	Count of properties at risk of flooding externally during a 1 in 20 year return period rainfall event	23,492	23,272	23,695	29,941	30,935
PO3 – 1 in 50 Year Population at Risk	Population at risk of flooding during a 1 in 50 year return period rainfall event	47,847	48,055	48,200	61,927	64,423
PO6 – Pollution	Count of manholes near watercourses at risk of flooding during a 1 in 5 year return period rainfall event	320	322	330	406	420

### Water Industry National Environment Programme (WINEP)

The Water Industry National Environment Programme (WINEP) is the programme of actions water companies need to take to meet statutory environmental obligations, non-statutory environmental requirements or delivery against a water company’s statutory functions.

Statutory obligations (S) arise from legislative requirements and the need to comply with obligations imposed directly by statute or by permits, licences and authorisations granted by the Secretary of State, the Environment Agency or other body of competent jurisdiction. Other statutory obligations include ministerial directions and meeting specific planning requirements. While it is important to understand the costs and benefits of actions needed, water companies must complete WINEP actions to fulfil statutory obligations.

Further information can be found at [Water industry national environment programme \(WINEP\) methodology - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/water-industry-national-environment-programme-winep-methodology).

## PLANNING OBJECTIVE ASSESSMENT

### Planning Objective Risk Scoring

The DWMP planning objectives have been assessed in line with the common scoring approach followed by all water companies.

Risk scores have been calculated at drainage area level, following the approach outlined below. Further detail on how the scores have been calculated for each of the planning objectives is within the Problem Characterisation methodology.

Risk Score	Description
0	<b>Low Risk</b> – Levels of planning objective risk within the drainage area are in the bottom quartile and/or there are no assets identified as higher priority requiring interventions throughout the planning periods.
1	<b>Medium Risk</b> – Levels of planning objective risk within the drainage area are in the middle two quartiles and/or there are assets identified as lower priority requiring interventions throughout the planning periods.
2	<b>High Risk</b> – Levels of planning objective risk within the drainage area are in the top quartile and/or there are assets identified as higher priority requiring interventions throughout the planning periods.

Drainage Area		PO1 – Internal Flood Risk			PO2 – External Flood Risk			PO3 – 1 in 50 Year Population at Risk			PO4 – Bathing Water			PO5 – River Water			PO6 - Pollution			PO8 – WwTW DWF Compliance		
		2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060
01-D01	Alnwick	2	2	2	1	2	2	2	2	2	0	0	0	2	2	2	0	1	1	0	0	0
01-D02	Amble & Warkworth	1	1	2	1	1	1	1	1	1	2	2	2	2	2	2	1	1	1	0	0	0
01-D03	Shilbottle	2	2	2	2	2	2	2	2	2	0	0	0	1	1	1	0	0	0	0	0	0
01-D04	Acklington & Togston	1	2	2	2	2	2	2	2	2	0	0	0	0	0	0	1	1	1	0	0	0
01-D05	Felton	2	2	2	2	2	2	1	2	2	0	0	0	2	2	2	2	2	2	0	0	0
01-D06	Newton on the Moor	2	2	2	1	1	1	1	2	2	0	0	0	0	0	0	2	2	2	0	0	0
01-D07	Radcliffe	0	0	0	2	2	2	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0
01-D08	Hampeth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D09	Rothbury	2	2	2	2	2	2	2	2	2	0	0	0	2	2	2	2	2	2	0	0	0
01-D10	Thropton	2	2	2	2	2	2	2	2	2	0	0	0	2	2	2	2	2	2	0	2	2
01-D11	Whittingham	1	0	2	1	1	1	2	2	2	0	0	0	0	0	0	2	2	2	0	0	0
01-D12	Powburn	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	2	2	2	0	2	2
01-D13	Eglington	1	1	1	2	2	2	2	2	2	0	0	0	0	0	0	2	2	2	0	0	0
01-D14	Harbottle	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0
01-D15	Glanton	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0
01-D17	Hepple	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D18	Netherton	0	0	0	1	1	1	2	2	2	0	0	0	2	2	2	2	2	2	0	0	0
01-D19	Alwinton	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0
01-D20	Wingates	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D21	Harwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D22	Embleton Terrace	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D23	Snitter	0	2	2	2	1	1	2	2	2	0	0	0	2	2	2	0	0	0	0	0	0
01-D24	Thrunton Brick Works	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D25	Longhoughton & Boulmer	2	2	2	2	2	2	1	2	2	0	0	0	1	1	1	0	0	0	0	0	0

Drainage Area		PO1 – Internal Flood Risk			PO2 – External Flood Risk			PO3 – 1 in 50 Year Population at Risk			PO4 – Bathing Water			PO5 – River Water			PO6 - Pollution			PO8 – WwTW DWF Compliance		
		2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060
01-D26	Lesbury	1	1	1	1	2	2	2	2	2	0	0	0	2	2	2	2	2	2	0	0	2
01-D27	Embleton	1	2	2	1	2	2	1	2	2	0	0	0	1	1	1	0	1	1	0	2	2
01-D28	Denwick	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D29	Craster South	0	0	0	1	2	2	2	2	2	0	0	0	1	1	1	0	0	0	0	0	0
01-D30	Dunstan	0	0	0	2	2	2	2	2	2	0	0	0	2	2	2	0	0	0	0	0	0
01-D31	Rennington	0	0	0	1	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
01-D32	Alnmouth	2	2	2	0	1	1	1	2	2	0	0	0	2	2	2	0	0	0	0	0	2
01-D33	Craster North	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
01-D34	Whiteadder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D35	Berwick	2	2	2	1	1	1	1	2	2	2	2	2	2	2	2	0	0	0	0	0	0
01-D36	Wooler	2	2	2	2	2	2	2	2	2	0	0	0	2	2	2	1	2	2	0	0	0
01-D37	Millfield	2	2	2	2	2	2	2	2	2	0	0	0	1	1	1	1	1	1	0	0	0
01-D38	Chatton	1	2	2	1	1	1	2	2	2	0	0	0	2	2	2	0	0	0	0	0	0
01-D39	Cornhill on Tweed	0	0	1	1	1	1	1	1	1	0	0	0	1	1	1	0	0	0	0	0	0
01-D40	Branxton	0	0	0	1	2	2	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0
01-D41	Wark	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
01-D42	Etal	0	0	0	2	2	2	1	2	2	0	0	0	2	2	2	2	2	2	0	0	0
01-D43	Crookham	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
01-D44	Donaldsons Lodge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D45	Seahouses	1	2	2	1	1	1	2	2	2	2	2	2	1	1	1	0	0	0	0	0	0
01-D46	Belford	0	1	1	0	0	0	0	1	1	0	0	0	1	1	1	1	1	1	0	0	0
01-D47	Beadnell	1	2	2	1	1	1	1	2	2	2	2	2	0	0	0	0	0	0	0	0	0
01-D48	Bamburgh	0	1	1	1	0	1	1	1	1	2	2	2	0	0	0	0	0	0	0	0	0
01-D49	Ellingham	0	0	0	0	1	1	2	2	2	0	0	0	0	0	0	2	2	2	0	0	0

Drainage Area		PO1 – Internal Flood Risk			PO2 – External Flood Risk			PO3 – 1 in 50 Year Population at Risk			PO4 – Bathing Water			PO5 – River Water			PO6 - Pollution			PO8 – WwTW DWF Compliance		
		2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060
01-D50	Belford Industrial Estate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0
01-D51	Norham	2	2	2	2	2	2	2	2	2	0	0	0	2	2	2	2	2	2	0	0	0
01-D52	Lowick	2	2	2	2	2	2	2	2	2	0	0	0	1	1	1	1	1	1	0	0	0
01-D53	Horncliffe North	2	2	2	2	2	2	1	2	2	0	0	0	2	2	2	0	0	0	0	0	0
01-D54	Horncliffe South	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D55	Holy Island	1	1	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0
01-D56	Bowsden	2	2	2	1	1	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0
01-D57	Shoresdean	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D58	Fenwick	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D59	Haggerston	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0
01-D60	Longhorsley	1	1	1	2	2	2	1	2	2	0	0	0	0	0	0	0	0	0	0	2	2
01-D61	Togston Hall	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D63	Alwinton West	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D64	Berwick Bowling Club	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D65	Bridge Terrace	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D66	Castlegate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D67	Warren Mill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D68	Foxton Hall	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D69	Old Helsay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D70	Rock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D71	CHATHILL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D01	Blyth	1	1	1	0	1	1	1	1	1	2	2	2	2	2	2	0	0	0	0	0	0
02-D02	Cramlington	0	1	1	0	1	1	0	1	1	0	0	0	1	1	1	0	0	0	0	0	0
02-D03	Horton Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Drainage Area		PO1 – Internal Flood Risk			PO2 – External Flood Risk			PO3 – 1 in 50 Year Population at Risk			PO4 – Bathing Water			PO5 – River Water			PO6 - Pollution			PO8 – WwTW DWF Compliance		
		2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060
02-D13	Morpeth	1	1	1	1	1	1	1	1	1	0	0	0	2	2	2	1	1	1	0	2	2
02-D14	Mitford	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D15	Ulgham	1	1	2	0	0	0	1	2	2	0	0	0	0	0	0	1	1	1	0	2	2
02-D16	Broomhill	1	2	2	1	1	1	1	2	2	2	2	2	0	0	0	1	1	1	0	0	2
02-D17	Lyneburn Valley	2	2	2	1	2	2	1	2	2	0	0	0	2	2	2	1	2	2	0	0	2
02-D18	Cresswell	1	1	1	0	1	1	0	0	0	2	2	2	0	0	0	0	0	0	0	0	2
02-D19	Berwick Hill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D20	Stannington Station	0	1	2	2	2	2	1	1	1	0	0	0	0	0	0	1	1	1	0	0	0
02-D21	Hepscott	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	1	1	1	0	0	0
02-D22	Pegswood	1	1	1	1	2	2	1	1	2	0	0	0	1	1	1	0	0	0	0	0	0
02-D23	Longhirst	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D24	Miners Homes, Longhirst	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D25	St Marys Hospital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D26	Gubeon Wood, Tranwell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D28	Rose Cottage, Longhirst	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D29	Stamfordham	1	2	2	1	1	1	1	1	1	0	0	0	1	1	1	2	2	2	0	0	0
02-D30	Whalton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D31	Matfen	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D32	Belsay	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	2	2	2	0	0	0
02-D33	Scots Gap & Cambo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D34	Ogle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D35	Ingoe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

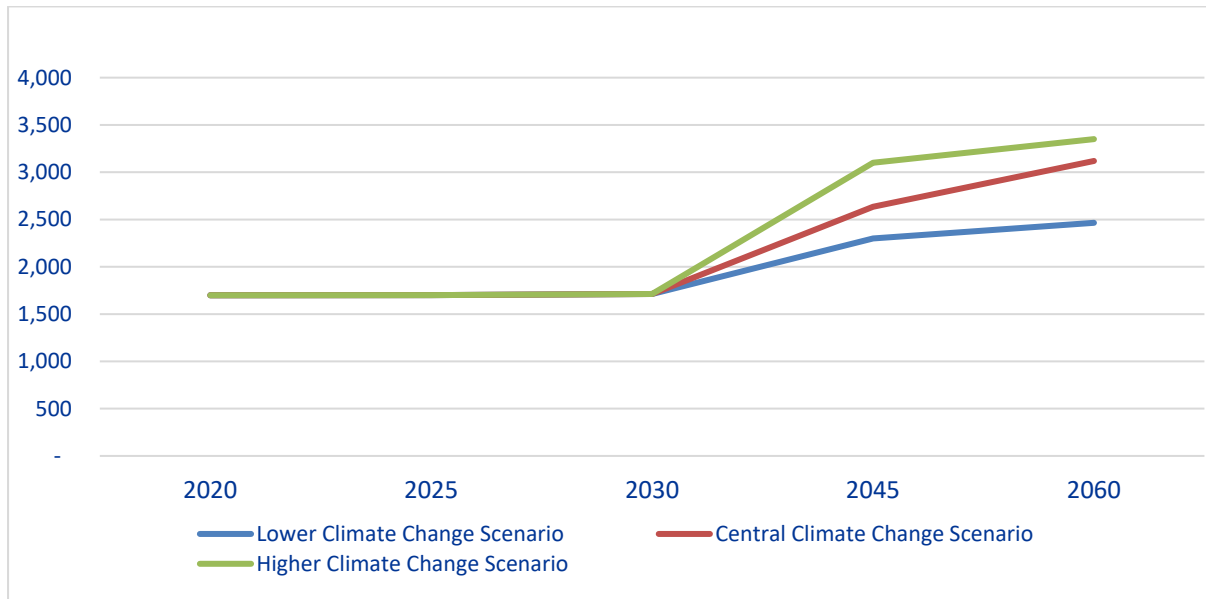
Drainage Area		PO1 – Internal Flood Risk			PO2 – External Flood Risk			PO3 – 1 in 50 Year Population at Risk			PO4 – Bathing Water			PO5 – River Water			PO6 - Pollution			PO8 – WwTW DWF Compliance		
		2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060
02-D36	Capheaton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D37	Fenwick	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
02-D38	Milbourne	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D39	Wallridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D40	Kirkheaton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D41	Dalton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D42	Ryal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D43	Kirkwhelpington	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	1	2	2	0	0	0
02-D44	Kirkharle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D45	Ashington	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	0	0	0	0	0	0
02-D46	Bedlington & Cambois	1	1	2	1	1	1	1	2	2	0	0	0	2	2	2	1	1	1	0	0	0
02-D49	Bothal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D50	Hebron	0	0	0	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
02-D51	Collingwood Cottages	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D52	Netherwitton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03-D68	Great Whittington	0	0	0	1	1	1	1	1	2	0	0	0	0	0	0	2	2	2	0	0	0

### Climate Change Sensitivity

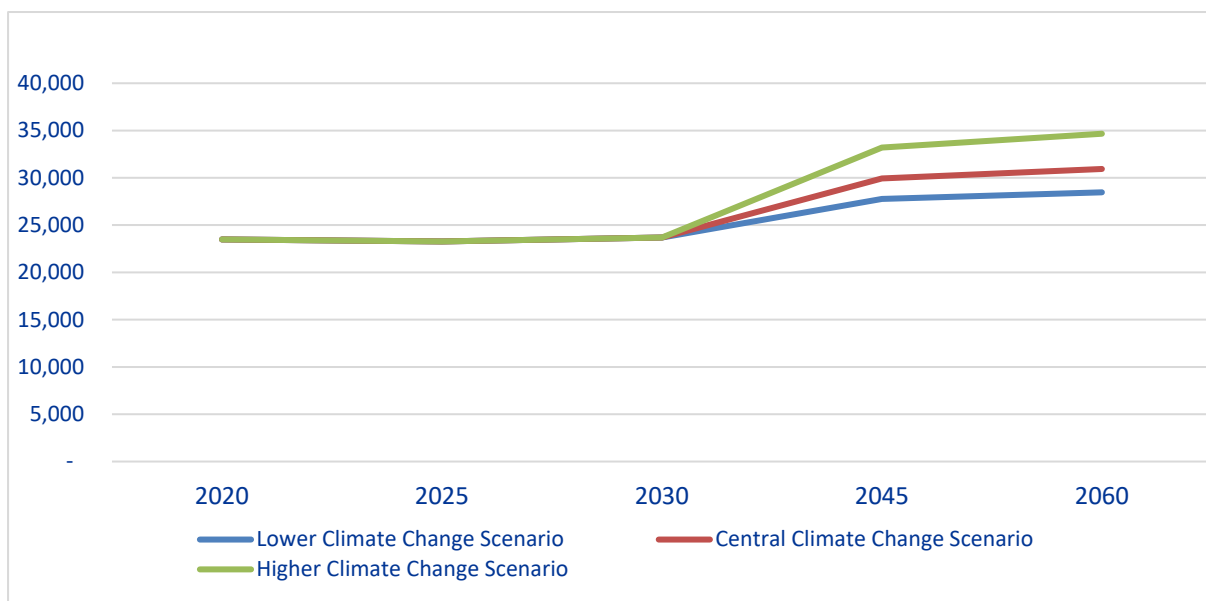
As outlined in the BRAVA methodology, two additional climate scenarios were analysed to evaluate the impact on the planning objectives of Lower Emissions and Higher Emissions climate scenarios.

The following graphics outline the impact on the planning objective risk numbers for the flooding and pollution planning objectives within the Northumberland Level 2 SPA in the different climate scenarios that have been modelled.

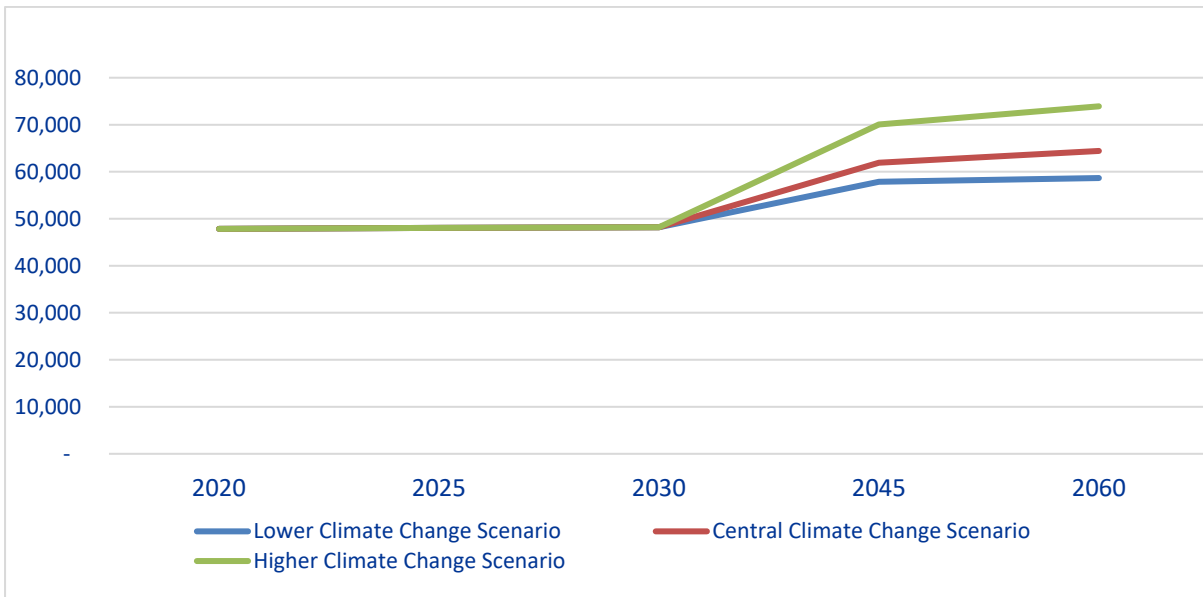
#### PO1 – Internal Flood Risk – Northumberland L2 SPA



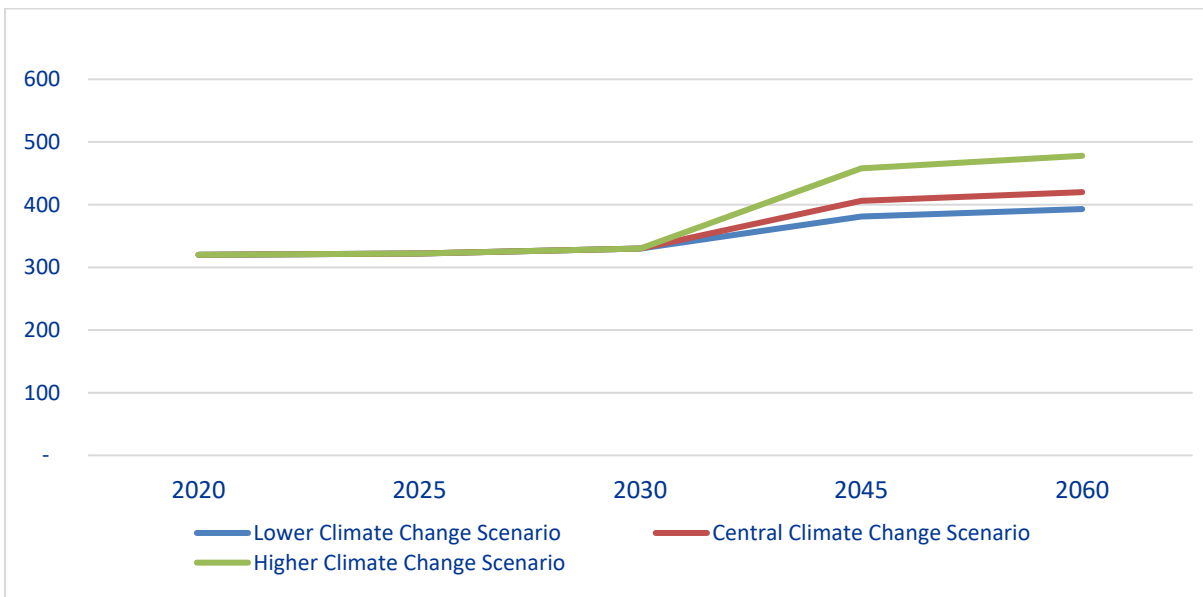
#### PO2 – External Flood Risk – Northumberland L2 SPA



**PO3 – 1 in 50 Year Population at Risk – Northumberland L2 SPA**



**PO6 – Pollution – Northumberland L2 SPA**



Our business plan is based on adaptive planning principles. We begin to use this more and more to think about an uncertain future. This long-term strategy is being developed alongside the long-term planning frameworks – in particular, the well-established Water Resources Management Plan process and the new Drainage and Wastewater Management Plan process.

## OPTION DEVELOPMENT

### Our Plan for the Northumberland L2 SPA

#### What Are We Doing?

The DWMP has been prepared taking the Best Value options within catchments and also including sustainable options that were not identified as Best Value but did reduce the volume of below-ground storage required within a catchment.

A summary of the interventions that have been included within the DWMP within the Northumberland L2 SPA are included within the following tables.

#### Storm Overflow Discharge Reduction Plan

Intervention Type	2025 to 2030	2030 to 2035	2035 to 2040	2040 to 2045	2045 to 2050
Storm Overflows addressed by Spill Frequency Reduction Schemes	33	37	56	33	22
Storm Overflows requiring Screening Provision Schemes	21	15	44	28	25

#### Wastewater Treatment Works Compliance

Intervention Type	2025 to 2030	2030 to 2035	2035 to 2040	2040 to 2045	2045 to 2050	2050 to 2055	2055 to 2060
WwTW DWF Compliance – Investigations / Schemes	-	1	1	-	1	-	1
WwTW Quality Compliance – Investigations	19 (P) 3 (BOD) 6 (Amm)	- (P) - (BOD) - (Amm)	- (P) - (BOD) - (Amm)	- (P) - (BOD) - (Amm)	- (P) - (BOD) - (Amm)	- (P) - (BOD) - (Amm)	- (P) - (BOD) - (Amm)
WwTW Quality Compliance - Schemes	4 (P) 3 (BOD) 4 (Amm)	15 (P) - (BOD) 2 (Amm)	- (P) - (BOD) - (Amm)	- (P) - (BOD) - (Amm)	- (P) - (BOD) - (Amm)	- (P) - (BOD) - (Amm)	- (P) - (BOD) - (Amm)

#### Long-Term Delivery Strategy – Flooding and Pollution

The Government's 25 Year Environment Plan (25YEP) requires us to invest to:

- Reduce nitrogen and phosphorus pollution, through catchment and nature-based solutions where possible.
- Improve drainage and environmental water quality, and reduce surface water flooding risk, through our Drainage and Wastewater Management Plan (DWMP).

Our long term delivery strategy sets out our ambition to continue to reduce sewer flooding over the next 25 years. Our plan sets out how we will match the 25YEP by reducing internal and external sewer flooding by 60% by 2050.

### Water Industry National Environment Programme (WINEP)

We have included proposals in our Business Plan for a number of schemes to be delivered between 2025 and 2030 to meet our statutory and non-statutory obligations and functions. The schemes that are proposed will deliver improvements against the drivers that are included in the following table.

WINEP Driver Code	Description
EnvAct_IMP1	Actions to Reduce phosphorus loading from treated wastewater by 80% by 2037 against a 2020 baseline
EnvAct_IMP3	Improvements to reduce storm overflows that spill to designated bathing waters to protect public health.
EnvAct_IMP4	Improvements to reduce storm overflows spills so that they do not discharge above an average of 10 rainfall events per year by 2050.
25YEP_IMP	Locally significant environmental measures not eligible under any other driver, but with clear evidence of customer support.
HD_IMP_NN	Actions to reduce total phosphorus and/or total nitrogen levels to the Technically Achievable Limit (TAL) from discharges which drain to catchments where Nutrient Neutrality is advised.
HD_IMP	Action to contribute to restoration of a European site or Ramsar site to move towards meeting the conservation objectives.
U_IMP1	Actions to improve discharges from agglomerations that, through population growth, have crossed the population thresholds in the UWWTR and therefore must achieve more stringent UWWTR requirements. This includes newly qualifying discharges (from agglomerations >10,000pe) within existing sensitive areas. This includes discharges of >2,000 pe to fresh waters and estuaries and discharges >10,000 pe to coastal waters, as well as discharges >10,000 pe and 100,000 pe to Sensitive Areas.

The full list of schemes that are proposed within the Northumberland L2 area can be found at the end of this document.

### How Much Does Our Plan Cost?

The following table summarises the costs that are included within the DWMP for the delivery of the identified interventions. The costs shown in the table are £million.

Intervention Type	2025 to 2030	2030 to 2035	2035 to 2040	2040 to 2045	2045 to 2050	2050 to 2055	2055 to 2060
Storm Overflow Spill Frequency Reduction Schemes	284.65	146.55	118.48	170.11	25.74	-	-



Screening Provision Schemes	7.44	4.42	12.35	5.02	3.56	-	-
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### Long-Term Delivery Strategy for Flooding

It is anticipated that we will achieve our flood risk reduction targets in a number of ways. For example,

- Working in partnership with others in the Northumbria Integrated Drainage Partnership
- Working with customers and communities for the widescale disconnection of roof drainage from the combined sewer network
- Implementing source control via sustainable drainage measures (SuDS) including wetland creation
- Implementing SMART networks throughout the region
- Disconnecting highway runoff from the combined sewer network
- Working with others to implement permeable pathing and roadways schemes.

We have estimated that the cost of achieving our ambitious targets will be £1 billion between 2030 and 2050. We will seek customer support for investment to achieve these targets.

The following table summarises the level of risk within the Wear L2 SPA for the flooding planning objectives following the implementation of the Long-Term Delivery Strategy for flooding.

Planning Objective	Measure	Count				
		2020	2025	2030	2045	2060
PO1 – Internal Flood Risk	Count of properties at risk of flooding internally during a 1 in 20 year return period rainfall event	1,699	1,700	1,712	1,080	1,055
PO2 – External Flood Risk	Count of properties at risk of flooding externally during a 1 in 20 year return period rainfall event	23,492	23,272	23,695	10,881	7,456

### Planning Objective Risk Scoring

The planning objective risk scores have been evaluated with the proposed DWMP interventions delivered.

Drainage Area		PO1 – Internal Flood Risk			PO2 – External Flood Risk			PO3 – 1 in 50 Year Population at Risk			PO4 – Bathing Water			PO5 – River Water			PO6 - Pollution			PO8 – WwTW DWF Compliance		
		2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060
01-D01	Alnwick	2	0	1	1	0	0	2	1	1	0	0	0	2	0	0	0	1	1	0	0	0
01-D02	Amble & Warkworth	1	0	0	1	0	0	1	1	1	2	0	0	2	0	0	1	1	1	0	0	0
01-D03	Shilbottle	2	0	0	2	0	0	2	1	1	0	0	0	1	0	0	0	0	0	0	0	0
01-D04	Acklington & Togston	1	0	1	2	0	0	2	1	1	0	0	0	0	0	0	1	1	1	0	0	0
01-D05	Felton	2	0	1	2	0	0	1	1	1	0	0	0	2	1	0	2	2	2	0	0	0
01-D06	Newton on the Moor	2	0	0	1	0	0	1	1	1	0	0	0	0	0	0	2	2	2	0	0	0
01-D07	Radcliffe	0	0	0	2	2	2	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0
01-D08	Hampeth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D09	Rothbury	2	0	1	2	0	0	2	0	1	0	0	0	2	0	0	2	2	2	0	0	0
01-D10	Thropton	2	0	1	2	0	0	2	1	1	0	0	0	2	0	0	2	2	2	0	0	0
01-D11	Whittingham	1	0	2	1	1	1	2	2	2	0	0	0	0	0	0	2	2	2	0	0	0
01-D12	Powburn	2	0	0	2	0	0	2	1	1	0	0	0	0	0	0	2	2	2	0	0	0
01-D13	Eglingham	1	0	0	2	2	2	2	2	2	0	0	0	0	0	0	2	2	2	0	0	0
01-D14	Harbottle	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
01-D15	Glanton	2	0	2	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D17	Hepple	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D18	Netherton	0	0	0	1	1	1	2	2	2	0	0	0	2	0	0	2	2	2	0	0	0
01-D19	Alwinton	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
01-D20	Wingates	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D21	Harwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D22	Embleton Terrace	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D23	Snitter	0	0	0	2	0	0	2	1	1	0	0	0	2	0	0	0	0	0	0	0	0
01-D24	Thrunton Brick Works	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Drainage Area		PO1 – Internal Flood Risk			PO2 – External Flood Risk			PO3 – 1 in 50 Year Population at Risk			PO4 – Bathing Water			PO5 – River Water			PO6 - Pollution			PO8 – WwTW DWF Compliance		
		2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060
01-D25	Longhoughton & Boulmer	2	0	0	2	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
01-D26	Lesbury	1	0	1	1	0	1	2	2	2	0	0	0	2	0	0	2	2	2	0	0	0
01-D27	Embleton	1	0	1	1	0	0	1	0	0	0	0	0	1	0	0	0	1	1	0	0	0
01-D28	Denwick	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D29	Craster South	0	0	0	1	2	2	2	2	2	0	0	0	1	0	0	0	0	0	0	0	0
01-D30	Dunstan	0	0	0	2	2	2	2	2	2	0	0	0	2	0	0	0	0	0	0	0	0
01-D31	Rennington	0	0	0	1	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
01-D32	Alnmouth	2	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
01-D33	Craster North	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
01-D34	Whiteadder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D35	Berwick	2	0	1	1	0	0	1	1	1	2	0	0	2	0	0	0	0	0	0	0	0
01-D36	Wooler	2	0	1	2	0	0	2	0	0	0	0	0	2	0	0	1	1	1	0	0	0
01-D37	Millfield	2	0	2	2	0	0	2	0	0	0	0	0	1	0	0	1	1	1	0	0	0
01-D38	Chatton	1	0	0	1	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0
01-D39	Cornhill on Tweed	0	0	1	1	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0
01-D40	Branxton	0	0	0	1	2	2	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0
01-D41	Wark	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
01-D42	Etal	0	0	0	2	2	2	1	2	2	0	0	0	2	0	0	2	2	2	0	0	0
01-D43	Crookham	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
01-D44	Donaldson's Lodge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D45	Seahouses	1	0	0	1	0	0	2	1	1	2	0	0	1	0	0	0	0	0	0	0	0
01-D46	Belford	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	1	1	1	0	0	0
01-D47	Beadnell	1	0	0	1	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0
01-D48	Bamburgh	0	0	0	1	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0

Drainage Area		PO1 – Internal Flood Risk			PO2 – External Flood Risk			PO3 – 1 in 50 Year Population at Risk			PO4 – Bathing Water			PO5 – River Water			PO6 - Pollution			PO8 – WwTW DWF Compliance		
		2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060
01-D49	Ellingham	0	0	0	0	1	1	2	2	2	0	0	0	0	0	0	2	2	2	0	0	0
01-D50	Belford Industrial Estate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0
01-D51	Norham	2	0	0	2	0	0	2	1	1	0	0	0	2	0	0	2	2	2	0	0	0
01-D52	Lowick	2	0	1	2	0	0	2	0	0	0	0	0	1	0	0	1	1	1	0	0	0
01-D53	Horncliffe North	2	0	0	2	0	0	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0
01-D54	Horncliffe South	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D55	Holy Island	1	0	1	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0
01-D56	Bowsden	2	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D57	Shoresdean	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D58	Fenwick	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D59	Haggerston	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
01-D60	Longhorsley	1	0	0	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
01-D61	Togston Hall	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D63	Alwinton West	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D64	Berwick Bowling Club	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D65	Bridge Terrace	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D66	Castlegate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D67	Warren Mill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D68	Foxton Hall	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D69	Old Helsay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D70	Rock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01-D71	CHATHILL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D01	Blyth	1	0	1	0	0	0	1	1	1	2	0	0	2	0	0	0	0	0	0	0	0

Drainage Area		PO1 – Internal Flood Risk			PO2 – External Flood Risk			PO3 – 1 in 50 Year Population at Risk			PO4 – Bathing Water			PO5 – River Water			PO6 - Pollution			PO8 – WwTW DWF Compliance			
		2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	
02-D02	Cramlington	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
02-D03	Horton Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D13	Morpeth	1	0	1	1	0	0	1	1	1	0	0	0	2	0	0	1	1	1	0	0	0	0
02-D14	Mitford	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D15	Ulgham	1	0	1	0	0	0	1	2	2	0	0	0	0	0	0	1	1	1	0	0	0	0
02-D16	Broomhill	1	0	0	1	0	0	1	1	1	2	0	0	0	0	0	1	1	1	0	0	0	0
02-D17	Lyneburn Valley	2	0	1	1	0	0	1	1	1	0	0	0	2	1	0	1	2	2	0	0	0	0
02-D18	Cresswell	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
02-D19	Berwick Hill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D20	Stannington Station	0	0	1	2	2	1	1	1	1	0	0	0	0	0	0	1	1	1	0	0	0	0
02-D21	Hepscott	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0
02-D22	Pegswood	1	0	1	1	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0
02-D23	Longhirst	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D24	Miners Homes, Longhirst	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D25	St Marys Hospital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D26	Gubeon Wood, Tranwell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D28	Rose Cottage, Longhirst	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D29	Stamfordham	1	0	0	1	0	0	1	0	0	0	0	0	1	0	0	2	2	2	0	0	0	0
02-D30	Whalton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D31	Matfen	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D32	Belsay	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	2	2	2	0	0	0	0
02-D33	Scots Gap & Cambo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Drainage Area		PO1 – Internal Flood Risk			PO2 – External Flood Risk			PO3 – 1 in 50 Year Population at Risk			PO4 – Bathing Water			PO5 – River Water			PO6 - Pollution			PO8 – WwTW DWF Compliance		
		2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060	2020	2045	2060
02-D34	Ogle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D35	Ingoe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D36	Capheaton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D37	Fenwick	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
02-D38	Milbourne	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D39	Wallridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D40	Kirkheaton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D41	Dalton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D42	Ryal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D43	Kirkwhelpington	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	1	2	2	0	0	0
02-D44	Kirkharle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D45	Ashington	1	0	1	1	1	1	1	1	1	2	0	0	2	0	0	0	0	0	0	0	0
02-D46	Bedlington & Cambois	1	0	1	1	0	0	1	1	1	0	0	0	2	0	0	1	1	1	0	0	0
02-D49	Bothal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D50	Hebron	0	0	0	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
02-D51	Collingwood Cottages	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02-D52	Netherwitt on	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03-D68	Great Whittington	0	0	0	1	1	1	1	1	2	0	0	0	0	0	0	2	2	2	0	0	0

## CONCLUDING COMMENTS

Our DWMP forms part of our long-term delivery strategy. As we go about this, we will need to review our progress and adapt our future plans to take into account changing circumstances. These include how customer views about priorities and affordability evolve; new technologies that emerge; how supply chain capacity develops; changes in weather patterns; and customer behaviour changes.

Setting a long-term delivery strategy allows us to seek early certainty on the investment we do not expect to change, while acknowledging these factors could mean choosing different pathways in future. We will consider those choices as and when we update our DWMP and at subsequent price reviews, which take place every five years. At each point we update our DWMP, we will look further into the future to maintain a 40-year outlook on these issues.

Our PR24 business plan, covering 2025-30, will include projects to drive better, more efficient, and nature-based solutions to tackling drainage and storm overflows in the future.

## CONTACTING US

To view our DWMP, please go to our website at: [www.nwl.co.uk/dwmp](http://www.nwl.co.uk/dwmp).

To contact us:

Go to the Contact Us page at: [Contact us \(nwl.co.uk\)](http://www.nwl.co.uk/contact-us)

Or you can call our Head Office switchboard on 0345 604 7468.

Our phone lines are open from 8:00am to 5:00pm, Monday to Friday.

Feel free to write to us at:

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Northumbria House

Abbey Road

Pity Me

Durham

DH1 5FJ

**AMP8 WINEP SCHEMES IN NORTHUMBERLAND L2 DRAINAGE AREAS**

Action Name	Primary Driver Code	Benefitting WFD Waterbody	Drainage Area Reference	Drainage Area Name
WOOLER WATER CATCHMENT IMPROVEMENT (Wooler STW)	HD_IMP	River Tweed Special Area of Conservation	01-D36	Wooler
WOOLER WATER CATCHMENT IMPROVEMENT (Wooler STW)	HD_IMP	River Tweed Special Area of Conservation	01-D38	Chatton
WOOLER WATER CATCHMENT IMPROVEMENT (Wooler STW)	HD_IMP	River Tweed Special Area of Conservation	01-D39	Cornhill on Tweed
WOOLER WATER CATCHMENT IMPROVEMENT (Wooler STW)	HD_IMP	River Tweed Special Area of Conservation	01-D42	Etal
WOOLER WATER CATCHMENT IMPROVEMENT (Wooler STW)	HD_IMP	River Tweed Special Area of Conservation	01-D51	Norham
WOOLER WATER CATCHMENT IMPROVEMENT (Wooler STW)	HD_IMP	River Tweed Special Area of Conservation	01-D53	Horncliffe North
WOOLER WATER CATCHMENT IMPROVEMENT (Wooler STW)	HD_IMP	River Tweed Special Area of Conservation	01-D54	Horncliffe South
Morpeth STW	EnvAct_IMP1	GB103022077061 (Wansbeck from Font to Bothal Burn Water Body)	02-D13	Morpeth
Morpeth STW	EnvAct_IMP1	GB103022077061 (Wansbeck from Font to Bothal Burn Water Body)	02-D14	Mitford