

Settlement	Wastewater Treatment Works	WwTW Data				WwTW Network / Catchment	Comment
		WwTW Current Planning Status	Estimation of Capacity based on Growth Factor			Network Current Planning Status	
			10%	15%	20%		
Lisburn	Lisburn (New Holland)	Green	Red	Red	Red	Yellow	Lisburn (New Holland) catchment includes Lisburn, Lisburn Greater Urban Area, Hillsborough & Culcavy, Duneight, Halftown, Hillhall, Kesh Bridge, Long Kesh, Lower Broomhedge, Lurganure & Morningside. See Network Issue Note 1 & 2 below.
Lisburn Greater Urban Area	Lisburn (New Holland)	Green	Red	Red	Red	Yellow	Lisburn (New Holland) catchment includes Lisburn, Lisburn Greater Urban Area, Hillsborough & Culcavy, Duneight, Halftown, Hillhall, Kesh Bridge, Long Kesh, Lower Broomhedge, Lurganure & Morningside. See Network Issue Note 1 & 2 below.
Castlereagh Greater Urban Area including Dundonald	Kinnegar	Green	Green	Green	Green	Yellow	Kinnegar catchment includes flows from Castlereagh/Dundonald area, Crossnacreevy & Ryan Park. See Network Issue Notes 1, 4, 6 & 8 below.
Carryduff	Newtownbreda	Green	Green	Green	Yellow	Yellow	Newtownbreda (located within Belfast City Council Area) catchment includes flows from Saintfield / Carryduff area. Also, includes Ballylesson & Purdysburn. See Network Issue Notes 1, 3 & 6 below.
Hillsborough & Culcavy	Lisburn (New Holland)	Green	Red	Red	Red	Yellow	Lisburn (New Holland) catchment includes Lisburn, Lisburn Greater Urban Area, Hillsborough & Culcavy, Duneight, Halftown, Hillhall, Kesh Bridge, Long Kesh, Lower Broomhedge, Lurganure & Morningside. See Network Issue Note 1 & 2 below.
Moira	Moira	Green	Green	Green	Green	Yellow	See Network Issue Notes 1.
Aghalee	Aghalee	Green	Green	Green	Green	*	See Network Issue Note 7 below.
Annahilt	Annahilt	Green	Green	Green	Green	Yellow	Annahilt catchment includes Annahilt & Magheraconluce. See Network Issue Note 1 below.
Dromara	Dromara	Green	Green	Green	Green	Yellow	See Network Issue Notes 1, 5, 6 & 8 below.
Drumbeg	Drumbeg	Green	Red	Red	Red	*	Drumbeg catchment includes Ballyauglis, part of Ballycarn & Ballyskeagh, Drumbeg & Drumbo. See Network Issue Note 7 below.
Drumbo	Drumbeg	Green	Red	Red	Red	*	Drumbeg catchment includes Ballyauglis, part of Ballycarn & Ballyskeagh, Drumbeg & Drumbo. See Network Issue Note 7 below.
Glenavy	Glenavy	Red	Red	Red	Red	Yellow	See Network Issue Note 1 below.
Lower Ballinderry	Lower Ballinderry	Green	Green	Green	Red	*	See Network Issue Note 7 below.
Maghaberry	Maghaberry	Green	Green	Green	Green	Yellow	See Network Issue Note 1 below.
Milltown	Dunmurry	Green	Green	Green	Green	Yellow	Dunmurry catchment includes Lambeg, Milltown & Tullynacross. See Network Issue Note 1 below.
Moneyreagh	Moneyreagh	Green	Yellow	Yellow	Yellow	Yellow	See Network Issue Note 1 below.
Ravernet	Ravernet	Green	Red	Red	Red	*	See Network Issue Note 7 below.
Stoneyford	Stoneyford	Green	Green	Green	Green	*	See Network Issue Note 7 below.









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Upper Ballinderry	Upper Ballinderry				*	See Network Issue Note 7 below.	
Ballyaughlis	Drumbeg				*	Drumbeg catchment includes Ballyaughlis, part of Ballycarn & Ballyskeagh, Drumbeg & Drumbo. See Network Issue Note 7 below.	
Ballycarn	Drumbeg				*	Drumbeg catchment includes Ballyaughlis, part of Ballycarn & Ballyskeagh, Drumbeg & Drumbo. See Network Issue Note 7 below.	
Ballylesson	Newtownbreda					Newtownbreda (located within Belfast City Council Area) catchment includes flows from Saintfield / Carryduff area. Also, includes Ballylesson & Purdysburn. See Network Issue Notes 1, 3 & 6 below.	
Ballynadolly	Ballynadolly				*	See Network Issue Note 7 below.	
Ballyskeagh	Drumbeg				*	Drumbeg catchment includes Ballyaughlis, part of Ballycarn & Ballyskeagh, Drumbeg & Drumbo. See Network Issue Note 7 below.	
Crossnacreevy	Kinnegar					Kinnegar catchment includes flows from Castlereagh/Dundonald area, Crossnacreevy & Ryan Park. See Network Issue Notes 1, 4, 6 & 8 below.	
Drumlough Road	Drumlough				*	See Network Issue Note 7 below.	
Dundrod	Dundrod				*	See Network Issue Note 7 below.	
Duneight	Lisburn (New Holland)					Lisburn (New Holland) catchment includes Lisburn, Lisburn Greater Urban Area, Hillsborough & Culcavy, Duneight, Halftown, Hillhall, Kesh Bridge, Long Kesh, Lower Broomhedge, Lurganure & Morningside. See Network Issue Note 1 & 2 below.	
Feumore	Feumore				*	See Network Issue Note 7 below.	
Halftown	Lisburn (New Holland)					Lisburn (New Holland) catchment includes Lisburn, Lisburn Greater Urban Area, Hillsborough & Culcavy, Duneight, Halftown, Hillhall, Kesh Bridge, Long Kesh, Lower Broomhedge, Lurganure & Morningside. See Network Issue Note 1 & 2 below.	
Hillhall	Lisburn (New Holland)					Lisburn (New Holland) catchment includes Lisburn, Lisburn Greater Urban Area, Hillsborough & Culcavy, Duneight, Halftown, Hillhall, Kesh Bridge, Long Kesh, Lower Broomhedge, Lurganure & Morningside. See Network Issue Note 1 & 2 below.	
Kesh Bridge	Lisburn (New Holland)					Lisburn (New Holland) catchment includes Lisburn, Lisburn Greater Urban Area, Hillsborough & Culcavy, Duneight, Halftown, Hillhall, Kesh Bridge, Long Kesh, Lower Broomhedge, Lurganure & Morningside. See Network Issue Note 1 & 2 below.	
Lambeg	Dunmurry					Dunmurry catchment includes Lambeg, Milltown & Tullynacross. See Network Issue Note 1 below.	
Legacurry	Legacurry				*	See Network Issue Note 7 below.	
Long Kesh	Lisburn (New Holland)					Lisburn (New Holland) catchment includes Lisburn, Lisburn Greater Urban Area, Hillsborough & Culcavy, Duneight, Halftown, Hillhall, Kesh Bridge, Long Kesh, Lower Broomhedge, Lurganure & Morningside. See Network Issue Note 1 & 2 below.	



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Lower Broomhedge	Lisburn (New Holland)					Lisburn (New Holland) catchment includes Lisburn, Lisburn Greater Urban Area, Hillsborough & Culcavy, Duneight, Halftown, Hillhall, Kesh Bridge, Long Kesh, Lower Broomhedge, Lurganure & Morningside. See Network Issue Note 1 & 2 below.	
Lurganure	Lisburn (New Holland)					Lisburn (New Holland) catchment includes Lisburn, Lisburn Greater Urban Area, Hillsborough & Culcavy, Duneight, Halftown, Hillhall, Kesh Bridge, Long Kesh, Lower Broomhedge, Lurganure & Morningside. See Network Issue Note 1 & 2 below.	
Morningside	Lisburn (New Holland)					Lisburn (New Holland) catchment includes Lisburn, Lisburn Greater Urban Area, Hillsborough & Culcavy, Duneight, Halftown, Hillhall, Kesh Bridge, Long Kesh, Lower Broomhedge, Lurganure & Morningside. See Network Issue Note 1 & 2 below.	
Lurganville	Lurganville				*	See Network Issue Note 7 below.	
Magheraconluce	Annahilt					Annahilt catchment includes Annahilt & Magheraconluce. See Network Issue Note 1 below.	
Mullaghglass	Mullaghglass				*	Mullaghglass catchment includes Mullaghglass & St James. See Network Issue Note 7 below.	
Purdysburn	Newtownbreda					Newtownbreda (located within Belfast City Council Area) catchment includes flows from Saintfield / Carryduff area. Also, includes Ballylesson & Purdysburn. See Network Issue Notes 1, 3 & 6 below.	
St James	Mullaghglass				*	Mullaghglass catchment includes Mullaghglass & St James. See Network Issue Note 7 below.	
Tullynacross	Dunmurry					Dunmurry catchment includes Lambeg, Milltown & Tullynacross. See Network Issue Note 1 below.	
Ballyknockan	N/A	N/A	N/A	N/A	N/A	No public sewerage network available.	
Carr	N/A	N/A	N/A	N/A	N/A	No public sewerage network available.	
Boardmills	N/A	N/A	N/A	N/A	N/A	No public sewerage network available.	
Drumlough	N/A	N/A	N/A	N/A	N/A	No public sewerage network available.	
Halfpenny Gate	N/A	N/A	N/A	N/A	N/A	No public sewerage network available.	
Lurgill	N/A	N/A	N/A	N/A	N/A	No public sewerage network available.	
The Temple	N/A	N/A	N/A	N/A	N/A	No public sewerage network available.	
Upper Broomhedge	N/A	N/A	N/A	N/A	N/A	No public sewerage network available.	



<u>Key to Current WWTW and Network Planning Status</u>		<u>Key to WWTW Status based on Local Development Plan Growth Factors</u>	
	Development permitted - Capacity Available		Works has 'Reasonable Capacity'
	Restriction on new Development - Capacity Limited		Works is 'At or reaching Capacity'
	New Development refused - No Capacity		Works has 'Insufficient Capacity'
*	Drainage Area Plan Model does not exist for this small settlement. Status based on high level network screening tool, Operator experience and current performance data.		

Network Issue Notes

Note 1: NI Water's sewerage network capacity mapping tool and sewer network modelling activities have identified capacity issues in parts of the Lisburn, Moneyreagh, Annahilt, Dromara, Dunmurry, Raverent, Glenavy, Newtownbreda, Maghaberry and Kinnegar wastewater networks. As a result, negative planning responses may be provided by NI Water in parts of these catchments. NI Water can consider the provision of positive planning responses where developers can demonstrate (including calculations):

1. Like for like development
2. Extant previously approved development (where NI Water has given a positive response)
3. Where the development will offer a reduced loading on the sewer network, which may include storm separation and/or attenuation (may be subject to Article 154)

Note 2: Lisburn Drainage Area Plan (DAP) is planned for delivery in the second half of PC21 and the outputs are then used to inform solution planned for delivery during PC21 (subject to prioritisation and funding availability) or for future business planning (i.e. for PC27). Please see the General Notes section explaining the Definition of a Drainage Area Plan.

Note 3: Newtownbreda Drainage Area Plan (DAP) is planned for delivery in the first half of PC21 and the outputs are then used to inform solution planned for delivery during PC21 (subject to prioritisation and funding availability) or for future business planning (i.e. for PC27). Please see the General Notes section explaining the Definition of a Drainage Area Plan.

Note 4: Kinnegar Drainage Area Plan (DAP) is planned for delivery in the first half of PC21 and the outputs are then used to inform solution planned for delivery during PC21 (subject to prioritisation and funding availability) or for future business planning (i.e. for PC27). Please see the General Notes section explaining the Definition of a Drainage Area Plan.

Note 5: Dromara Drainage Area Plan (DAP) is planned for delivery in the first half of PC21 and the outputs are then used to inform solution planned for delivery during PC21 (subject to prioritisation and funding availability) or for future business planning (i.e. for PC27). Please see the General Notes section explaining the Definition of a Drainage Area Plan.

Note 6: NI Water has identified parts of the network where Unsatisfactory Intermittent Discharges (UIDs) have occurred. This means the sewer network cannot convey the flows to the WwTW and that there are spills from parts of the network into the receiving environment through combined sewer overflows (CSOs). The CSOs act as safety valves to stop the sewage backing in the sewers during rainfall events and causing the internal flooding of houses. When CSOs are operating more frequently than they should they are classified as unsatisfactory intermittent discharges (UIDS). As a result, negative planning responses may be provided by NI Water in parts of the respective catchments.

Note 7: Status based on analysis of existing Area Plan settlement boundary. Should settlement boundary change as a result of Local Development Plan (currently under development), headroom capacity status will be re-assessed and could be subject to change.

Note 8: NI Water WwTW upgrades Scheduled for PC21 Delivery.
 Upgrades of the Dromara and Kinnegar Wastewater Treatment Works are currently programmed to be completed within the PC21 Price Control period, subject to the all statutory approvals being in place, land acquisition (where appropriate), and the availability of funding.



General Notes:

QA/QC checks: NI Water corporate wastewater data sets compared to Ww Headroom Capacity spreadsheet 211117-AIR21 Figures.

The information provided in this document will be updated on an annual basis and is subject to change. Changes may occur as the result of with network modelling activities, planned WwTW and network upgrades or compliance issue arisals.

Definition of a Drainage Area Plan

A Drainage Area Plan is comprised of two stages: Stage 1: A Drainage Areas Study followed by Stage 2: Needs and Options.

The Drainage Area Study (DAS) generally takes approximately 2/3 years to complete (dependent on size of study area) and involves the building of a calibrated and validated sewer network model.

In order to build a model, information is required on sewer pipework geometry, size and condition. This requires extensive CCTV survey work and flow monitoring surveys throughout the sewer catchment.

Once built, calibrated and validated, the sewer network model can be used for developing a Drainage Area Plan via the Needs and Options stage. This involves assessing a range of sewer upgrade options and running scenarios for different design rainfall events. The models are used to simulate a 25-year design horizon by building in allowances for growth, urban creep and climate change. Model outputs are reviewed by NI Water's environmental regulator, NIEA who set the discharge consent standards with which NI Water must comply with via a capital works network upgrade solutions.

The verified DAS sewer model serves three purposes:

1. Corroborating existing and predicted out of sewer spills from CSOs (combined sewer overflows) as well as an identifying where surcharge conditions exists i.e. pipes operating above normal design parameters
2. Assessing the effectiveness of solution options for informing capital works e.g. the identification of a solution to alleviate an unsatisfactory intermittent discharge or UID (a non-compliant combined storm overflow (CSO)).
3. Assessing the capacity of a sewer network for serving new development and their connection to the public sewerage system.

