

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
			3%	10%	17%		
Ballymena	Ballymena	Green	Green	Green	Yellow	Ballymena catchment includes Ahoghill, Ballymena, Broughshane, Cullybackey, Kells & Connor and Woodgreen. <b>See Network Issue Notes 1, 3, 7 &amp; 9 below.</b>	
Carrickfergus	Carrickfergus	Green	Yellow	Red	Yellow	<b>See Network Issue Notes 1, 4, 7, 8 &amp; 9 below.</b>	
Larne	Larne	Red	Red	Red	Red	Larne catchment includes Ballygalley, Carncastle, Glynn, part of Magheramorne and Larne <b>See Network Issue Notes 1, 2, 7 &amp; 9 below.</b>	
Ahoghill	Ballymena	Green	Green	Green	Yellow	Ballymena catchment includes Ahoghill, Ballymena, Broughshane, Cullybackey, Kells & Connor and Woodgreen. <b>See Network Issue Notes 1, 3, 7 &amp; 9 below.</b>	
Broughshane	Ballymena	Green	Green	Green	Yellow	Ballymena catchment includes Ahoghill, Ballymena, Broughshane, Cullybackey, Kells & Connor and Woodgreen. <b>See Network Issue Notes 1, 3, 7 &amp; 9 below.</b>	
Cullybackey	Ballymena	Green	Green	Green	Yellow	Ballymena catchment includes Ahoghill, Ballymena, Broughshane, Cullybackey, Kells & Connor and Woodgreen. <b>See Network Issue Notes 1, 3 &amp; 7 below.</b>	
Greenisland	Greenisland	Green	Yellow	Red	Yellow	<b>See Network Issue Notes 1, 5, 7, 8 &amp; 9 below.</b>	
Whitehead	Ballystrudder (Retention Tank)	Green	Green	Red	Yellow	Ballystrudder catchment includes Ballystrudder & Whitehead. <b>See Network Issue Note 1.</b>	
Ballycarry	Ballycarry	Green	Green	Red	Yellow	<b>See Network Issue Note 1.</b>	
Ballygalley	Larne	Red	Red	Red	Red	Larne catchment includes Ballygalley, Carncastle, Glynn, part of Magheramorne and Larne <b>See Network Issue Notes 1, 2, 7 &amp; 9 below.</b>	
Ballylumford	Ballylumford Cottages	Green	Green	Green	*	<b>See Network Issue Note 8.</b>	
Ballystrudder	Ballystrudder (Retention Tank)	Green	Green	Red	Yellow	Ballystrudder catchment includes Ballystrudder & Whitehead. <b>See Network Issue Note 1.</b>	
Cargan	Cargan	Green	Green	Yellow	*		
Carnlough	Tully Road Headworks	Green	Green	Yellow	Yellow	Tully Road catchment includes Carnlough, Glenarm & Straidkilly. <b>See Network Issue Note 1 below.</b>	
Glenarm	Tully Road Headworks	Green	Green	Yellow	Yellow	Tully Road catchment includes Carnlough, Glenarm & Straidkilly. <b>See Network Issue Note 1 below.</b>	
Glynn	Larne	Red	Red	Red	Red	Larne catchment includes Ballygalley, Carncastle, Glynn, part of Magheramorne and Larne <b>See Network Issue Notes 1, 2, 7 &amp; 9 below.</b>	
Kells/Connor	Ballymena	Green	Green	Green	Yellow	Ballymena catchment includes Ahoghill, Ballymena, Broughshane, Cullybackey, Kells & Connor and Woodgreen. <b>See Network Issue Notes 1, 3, 7 &amp; 9 below.</b>	
Martinstown	Martinstown	Red	Red	Red	*	<b>See Network Issue Note 8.</b>	
Portglenone	Portglenone	Green	Yellow	Red	Yellow	Portglenone catchment includes Clady, Glenone, Inishrush and Portglenone. <b>See Network Issue Note 1.</b>	









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Ballynafie	Ballynafie	Red	Red	Red	*	See Network Issue Note 8.	
Buckna	Buckna	Green	Green	Green	*	See Network Issue Note 8.	
Carnalbanagh	Carnalbanagh	Green	Green	Green	*	See Network Issue Note 8.	
Carncastle	Larne	Red	Red	Red	Red	Larne catchment includes Ballygalley, Carncastle, Glynn, part of Magheramorne and Larne See Network Issue Notes 1, 2, 7 & 9 below.	
Clogh	Clogh	Red	Red	Red	*		
Craigyarren	Craigyarren	Green	Green	Green	*	See Network Issue Note 8.	
Duneany	Duneany	Green	Green	Green	*	See Network Issue Note 8.	
Glarryford	Glarryford	Green	Green	Green	*	See Network Issue Note 8.	
Glenoe	Glenoe	Green	Green	Green	*	See Network Issue Note 8.	
Grange Corner	Grange (Taylorstown)	Red	Red	Red	*	See Network Issue Notes 6, 8 & 9 below.	
Killybegs	Straid (Ballymena)	Red	Red	Red	*		
Mac Gregor's Corner	Killygore	Green	Green	Red	*	See Network Issue Note 8.	
Magheramorne	Magheramorne	Green	Green	Green	*	See Network Issue Note 8.	
Mill Bay	Mullaghboy	Red	Red	Red	*	Mullaghboy catchment includes Mill Bay & Mullaghboy.	
Moorfields	Moorfields	Red	Red	Red	*		
Mounthill	Mounthill	Green	Green	Green	*	See Network Issue Note 8.	
Mullaghboy	Mullaghboy	Red	Red	Red	*	Mullaghboy catchment includes Mill Bay & Mullaghboy.	
Newtown-Crommelin	Newtown-Crommelin	Red	Red	Red	*	See Network Issue Note 8.	
Slaght	Slaght	Green	Green	Red	*	See Network Issue Note 8.	
Straidkilly	Tully Road Headworks	Green	Green	Yellow	Yellow	Tully Road catchment includes Carnlough, Glenarm & Straidkilly. See Network Issue Note 1 below.	
Whitesides Corner	Procklis	Green	Green	Green	*	See Network Issue Note 8.	



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Woodgreen	Ballymena					Ballymena catchment includes Ahoghill, Ballymena, Broughshane, Cullybackey, Kells & Connor and Woodgreen. See Network Issue Notes 1, 3, 7 & 9 below.	
Browns Bay	N/A	N/A	N/A		N/A	No public sewerage network available.	
Carnageer	Munie	N/A	N/A		N/A	Part of Carnageer settlement has no public sewerage network.	
Milltown	N/A	N/A	N/A		N/A	No public sewerage network available.	
Raloo	N/A	N/A	N/A		N/A	No public sewerage network available.	



Key to Current WWTW and Network Planning Status		Key to WWTW Status based on Local Development Plan Growth Factors	
	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 Ballymena, Larne, Carrickfergus, Greenisland, Ballycarry, Portglenone, Tully Road (Carnlough & Glenarm), Whitehead/Ballystrudder/Ballycarry 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:** Larne 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 3:** Ballymena 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 4:** Carrickfergus 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:** Greenisland 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:** Flow and composition study ongoing; once complete and results analysed, preferred option will be agreed and upgrade scheme will progress. It is likely the upgrade of this works will commence early in PC21. Completed upgrade will address capacity issues.

**Note 7:** 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.

**See Note 8:** 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.

**See Note 9:** NI Water WwTW upgrades Scheduled for PC21 Delivery.

Upgrades of the Carrickfergus, Greenisland, Grange (Taylorstown) and Larne 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)).

