

## Chapter 30. Water infrastructure

The sustainable growth of County Sligo is dependent on the satisfactory delivery and management of public and private water infrastructure. A plan-led approach, in accordance with the County's Core Strategy, is required in the provision of such services.

Furthermore, this infrastructure needs to be provided in a manner that protects public health and is environmentally appropriate and economically effective.

**Irish Water**, the regulatory body for water in Ireland, became known as **Uisce Éireann** in January 2023. Uisce Éireann (UÉ) is responsible for the operation of all public water and wastewater services including management and maintenance of water and wastewater assets, planning and investment in new projects. Sligo County Council retains its role in facilitating the provision of adequate water services at a local level, through Service Level Agreements (SLAs).

Uisce Éireann is required to facilitate the growth of settlements in accordance with the Core Strategy at county level, and with national and regional planning policies and objectives, subject to the constraints of the UÉ's Capital Investment Plan.

The Uisce Éireann Capital Investment Plan 2020-2024 (CIP) sets out the priorities for investing 5.35 billion euro to deliver the most urgently needed improvements in drinking water quality, leakage reduction, water availability, wastewater compliance, efficiencies and customer service.

The CIP funds individual projects such as building new or upgrading existing water and wastewater treatment plants, upgrading existing networks, and national programmes such as the Leakage Reduction Programme, the National Disinfection Programme, the Small Towns and Villages Growth Programme, and the National Certification Authorisation Programme.

UÉ's CIP 2020-2024 includes six projects in County Sligo, some of which have been completed. All the water supply schemes and wastewater treatment plants operating in County Sligo, including those contained within the CIP 2020-2024, are presented in Tables 30.1 and 30.2.

### 30.1 Water supply

Currently there are eight schemes supplying potable water throughout Sligo – refer to Table 30.1. It is envisaged that, subject to the necessary upgrades being carried out, there will be adequate capacity to meet the projected increase in the population of County Sligo up to 2030 and beyond.

#### 30.1.1 Water supply for Sligo Town

Sligo Town is supplied by the Sligo and Environs Regional Water Supply Scheme (RWSS) from its Foxes Den and Kilsellagh Water Treatment Plants (WTPs). Foxes Den's 2021 upgrade increased capacity to 16.5 million litres per day. Upgrade works carried out at Kilsellagh WTP in 2023 resolved capacity issues.

These works have ensured that there will be adequate capacity to meet the targeted increase in Sligo Town's population for the Plan period.

In the longer term, a further upgrade at Foxes Den WTP may be required to accommodate the additional population increase by 2040.

### 30.1.2 Water supply for other settlements

Ballymote and Tobercurry are supplied from Lough Talt RWSS, where an “interim” Water Treatment Plant was commissioned in 2020 to meet short/medium-term needs. An alternative long-term supply for the area is required by 2028.

Enniscrone receives water from Lough Easky RWSS, which has available capacity to accommodate growth over the plan period.

Sligo and Environs RWSS provides water to Ballysadare, Collooney, Rosses Point and Strandhill.

Grange is supplied from the North Sligo RWSS, where solutions to find additional raw water are being investigated.

**Table 30.1** below lists County Sligo’s public Water Supply Schemes and their capacities based on information received in Q1 2023. The table includes reference to the settlements where supply issues have been identified.

### 30.1.3 Rural water supply and quality

Approximately 20% of dwellings throughout County Sligo do not have access to a public mains water supply system. These dwellings are served by group water schemes (GWS) or by individual wells.

Many private water users rely on groundwater sources that are prone to contamination from septic tanks or farmyard effluent. Therefore, the protection of underlying aquifers is important for the environmental quality of rural water supply.

Sligo County Council is responsible for the implementation of the DHLGH’s Rural Water Programme (including group schemes, private regulated water supplies and well grants), surface water drainage, flooding, and monitoring of surface water quality.

The Rural Water Programme facilitates the development of water services in rural areas, and it addresses deficiencies in group water schemes and private supplies where no alternative is available.

### 30.1.4 Water conservation and network management

Water conservation is key to the sustainable use of water resources, and it is a priority in all areas of the County, whether served by public or private supplies. Sligo County Council and Uisce Éireann are continually progressing leakage reduction, mains rehabilitation and capital maintenance activities.

Uisce Éireann is currently (2023) implementing a Leakage Reduction Programme. The Council will facilitate the delivery of this programme and promote water conservation and best-practice water conservation measures in all new developments.

**Table 30.1 Water supply schemes in County Sligo**

<b>Scheme</b>	<b>24-h production capacity (m3/day)</b>	<b>Current average daily production (m3/day)</b>	<b>Spare capacity (m3/day)</b>	<b>Planned works</b>
<b>Foxes Den Water Supply Scheme (Sligo and Environs)</b>	16,000	7,820	8,680	No planned works. Recently upgraded.
<b>Kilsellagh Water Supply Scheme (Sligo and Environs)</b>	8,000	4,800	3,200	No works are proposed by UÉ* in relation to this scheme.
<b>Lough Easky Regional Scheme</b>	4,400	3,125	1,275	No works are proposed by UÉ in relation to this scheme.
<b>Lough Talt Regional Scheme</b>	8,000	6,490	1,510	“interim” WTP** recently upgraded.
<b>North Sligo Regional Scheme</b>	3,300	1,995	1,305	No works are proposed by UÉ in relation to this scheme.
<b>South Sligo Regional Scheme</b>	1,500	1,035	465	Supplied by RCC*** from the Lough Gara WTP. No works are proposed by UÉ in relation to this scheme.  There is significant headroom available for future development. Spare capacity estimated.
<b>Riverstown Public Water Scheme</b>	640	230	410	No works are proposed by UE in relation to this scheme.
<b>Killaraght Regional Scheme</b>	100	60	40	Supplied from the Boyle / Ardcairn Regional Scheme by RCC. No works are proposed by UÉ in relation to this scheme.  There is significant headroom available for future development. Spare capacity estimated.

\* UÉ – Uisce Éireann \*\* WTP – Water Treatment Plant \*\*\* RCC – Roscommon County Council

## Water supply policies

It is the policy of Sligo County Council to:

- P-WS-1** Co-operate with Uisce Éireann to maximise the potential of existing capacity and to facilitate the timely delivery of new water services infrastructure, in order to support population and economic growth as set out in the Core Strategy of this Plan.
- P-WS-2** Liaise with Uisce Éireann in seeking to establish source management and protection zones around drinking water supply sources (ground and surface water) and develop appropriate management and maintenance measures for these sources.
- P-WS-3** Support the implementation of the Uisce Éireann’s Capital Investment Programmes (CIP) and Minor Works Programmes (MWP).
- P-WS-4** Promote the use of water conservation measures such as rainwater harvesting and grey water use in all new developments, in order to minimise water wastage and as viable alternative to attenuation.
- P-WS-5** Where connection to a public water supply is not possible, or the existing supply does not have sufficient capacity, the provision of a private water supply will be permitted only where it can be demonstrated that the proposed water supply meets the standards set out in the EU and national legislation and guidance, would not be prejudicial to public health and would not have a significant negative impact on the source or yield of an existing supply.
- P-WS-6** Proposals relating to water abstractions shall be subject to the appropriate environmental assessments and shall demonstrate compliance with the requirements of Article 6 of the Habitats Directive and with the Water Framework Directive.

## 30.2 Wastewater treatment

The provision of wastewater treatment infrastructure is imperative to facilitate the economic, social, and physical development of the county and to support settlement growth. The Environmental Protection Agency (EPA) is the statutory body tasked with ensuring that appropriate standards are put in place in the provision and operation of wastewater infrastructure.

Uisce Éireann is responsible for the treatment and disposal of wastewater in towns and villages where public wastewater treatment facilities are in place.

### 30.2.1 Wastewater treatment in Sligo Town

Sligo Town's Wastewater Treatment Plant (WWTP) has a capacity of 50,000 PE. Subject to an upgrade, the capacity can increase to 75,000 PE. This would be sufficient to accommodate the targeted population growth by 2030 and beyond.

The recent connection of the Bundoran Road wastewater pumping station to the Ballast Quay network will free up capacity in the Cartron catchment of Sligo Town. There are potential network constraints in the Magheraboy and Cartron catchments, including along Markievicz Road. The southern periphery of Sligo Town is not serviced.

The surface water drainage network in Sligo Town is limited and disjointed, leading to excess surface water flowing into the foul/combined network. It is important that stormwater is removed from combined sewers where possible, and that new surface water connections to the sewer are restricted.

In 2022, Irish Water/UE commenced the preparation of a Drainage Area Plan for Sligo Town. This involves a detailed assessment of the wastewater network capacity and will take several years to complete.

### 30.2.2 Wastewater treatment in other settlements

WWTP upgrade projects have been completed in Strandhill, Ballinafad, Tobercurry, Collooney, Ballymote and Charlestown-Bellaghy on the Sligo/Mayo border.

Grange WWTP is generally compliant with its Wastewater Discharge Licence, with some spare hydraulic capacity.

The Rosses Point Sewerage Scheme commenced construction in 2022, with completion envisaged by Q3 2023. The scheme involves providing a pumping station, rising main and gravity sewers to convey flows to the Sligo Town network, connecting at the Bundoran Road wastewater pumping Station.

At the time of drafting this CDP, there were no known major wastewater network constraints in the other settlements in the county.

### 30.2.3 Small Towns and Villages Growth Programme (STVGP)

Uisce Éireann co-operates with local authorities and local communities to upgrade WWTPs or provide new plants under the **Small Towns and Villages Growth Programme** (STVGP), which is a component of UÉ's Capital Investment Programme.

In 2020 Sligo County Council’s Water Services Section nominated the villages of **Cliffony, Mullaghmore, Castlebaldwin, Geevagh and Ballintogher** for inclusion in the programme.

Strategic assessments of the treatment plants in the nominated settlements have been carried out and Mullaghmore has progressed to Stage 2/concept design. The provision of a new WWTP to serve Mullaghmore will be included in Uisce Éireann’s CIP 2025–2029.

In 2022, Sligo County Council submitted two applications to the DHLGH, under Measure A8 of Circular L1-22 ‘Wastewater Collection and Treatment needs for Villages and Settlements without access to Public Wastewater Services’. The settlements nominated were **Ballygawley and Rathcormac**. Should the two villages be included in this programme, Uisce Éireann will work with the DHLGH and the Council to support the development and implementation of an appropriate wastewater treatment solution for each village.

A number of investment cycles will be required to address all candidates in the STVGP. UÉ plans to continue this programme into the investment period 2025-2029, and Sligo County Council will submit further proposals for new or upgraded WWTPs in small villages.

### 30.2.4 Prioritisation of investment

Proposed treatment works and extensions to wastewater treatment infrastructure throughout County Sligo are outlined in the Table 30.B below. The figures are based on Uisce Éireann’s Wastewater Treatment Capacity Register issued in June 2022. The next register will be issued in June 2023.

**Table 30.2 Wastewater treatment plants in County Sligo**

Town / village	Design PE* of the WWTP	Current loading PE*	Available PE*	Comments
<b>Aclare</b>	750	55	695	Spare capacity
<b>Ballinacarrow</b>	250	231	19	Spare capacity
<b>Ballinafad</b>	200	127	73	Spare capacity
<b>Ballincar</b>	n/a	n/a	n/a	There is currently no plant serving the Ballincar area. Residents of Ballincar will be able to connect to the upgrade to the Rosses Point Sewerage Scheme*, which will pump wastewater to the Teesan pumping station and onwards to Sligo Waste Water Treatment Plant***** where spare capacity is available. Works to be completed Q4 2023.
<b>Ballintogher</b>	350	334	16	Spare capacity. A strategic assessment was carried out via a STVGP***.

Town / village	Design PE* of the WWTP	Current loading PE*	Available PE*	Comments
Ballygawley	n/a	n/a	n/a	There is no WWTP in Ballygawley. An application was submitted to include the village in the Rural Water Programme 2022-2025.
Ballysadare	4,500	1,686	2,814	Spare capacity
Ballymote	3,500	2,594	906	Spare capacity
Banada	n/a	n/a	n/a	There is no WWTP in Banada
Bellaghy / Charlestown (Co. Mayo)	3,250	1339	1,911	Spare capacity
Bunnaadden	350	156	194	Spare capacity
Carney	2,500	471	2,029	Spare capacity
Castlebaldwin	100	99	1	No spare capacity. A strategic assessment was carried out via a STVGP***.
Cliffony	800	492	308	Spare capacity. A strategic assessment was carried out via a STVGP***.
Cloonacool	500	98	402	Spare capacity
Collooney	3,500	1889	1,611	Spare capacity
Coolaney	2,500	1201	1,299	Spare capacity
Culfadda	150	42	108	Spare Capacity
Curry	400	80	320	Spare capacity
Dromore West	2,500	263	2,237	Spare capacity
Drumcliffe	75	40	35	Limited spare capacity
Easky	450	371	79	Limited spare capacity
Enniscrone	5,000	3360	1,640	Spare capacity
Geevagh	250	170	80	Spare capacity
Gorteen	2,500	455	2,045	Spare capacity

Town / village	Design PE* of the WWTP	Current loading PE*	Available PE*	Comments
Grange	900	807	93	The Plant is generally compliant to WWDL**** with spare hydraulic capacity
Monasteraden	400	47	353	Spare capacity
Mullaghmore	320	771	0	This plant was assessed under the STVGP and is proposed to be included in UÉ's 2025-2029 Capital Investment Plan
Rathcormac	n/a	n/a	n/a	There is no WWTP in Rathcormac. An application was submitted to include the village in the Rural Water Programme 2022-2025.
Riverstown	600	359	241	Spare capacity
Rockfield	250	193	57	Spare capacity
Rosses Point	1,500	1,568	0	Rosses Point sewage network is currently being upgraded to provide a pumping station in the village to pump wastewater to the Teesan Pumping Station and onwards to SMD***** where spare capacity is available. Works to be completed Q4 2023.
Sligo Town	50,000	27,028	22,972	Spare capacity. There is capacity to upgrade the plant to 75,000 PE
Strandhill	3,700	2,343	1,357	The Plant is generally compliant to WWDL****. Uisce Éireann plan to review the hydraulic loads in the network.
Tourlestraun	n/a	n/a	n/a	There is no WWTP in Tourlestraun.
Tobercurry	3,500	2,420	1,080	Spare capacity

\* PE – Population equivalent; \*\* WWTP – Wastewater Treatment Plant; \*\*\* Small Towns and Villages Growth Programme; \*\*\*\* WWDL – Wastewater Discharge Licence; \*\*\*\*\* SMD – Sligo Main Drainage (WWTP)



### 30.2.5 Sludge management

At present, sludge generated from public sewerage schemes throughout the County and from private treatment systems (including individual septic tanks and on-site systems serving one-off housing) can be transported to a sludge hub centre at the Sligo Main Drainage Centre at Finisklin for treatment and disposal.

UE's *National Wastewater Sludge Management Plan* – a strategy designed to ensure a nationwide standardised approach for managing wastewater sludge over a 25-year period – proposes to develop a Sludge Hub Centre and Satellite Dewatering Centre network for wastewater sludge treatment, optimised on a regional basis rather than county basis.

### 30.2.6 Wastewater management in rural areas

Outside serviced towns and villages, much of the wastewater produced is treated and disposed of on-site by means of individual septic tanks and proprietary effluent treatment systems (PETS). It is essential that these systems are properly designed, installed and maintained to avoid environmental pollution (refer to **Section 33.2.7 On-site wastewater treatment systems** in Chapter 33 Development Management Standards).

Where single dwellings are located outside an area that is serviced by a public foul sewer, the developer will be required to submit details to demonstrate that the on-site wastewater treatment system can safely and adequately dispose of effluent in accordance with the EPA's 2021 *Code of Practice: Domestic Wastewater Treatment Systems (Population Equivalent  $\leq 10$ )*.

Where appropriate, the development of on-site wastewater treatment systems (OSWWTS) for tourism developments, small businesses or community facilities in unserved areas may be considered where:

- they are in single ownership

**AND**

- it is demonstrated to the satisfaction of the Planning Authority that the proposed OSWWTS is in accordance with EPA's 2021 *Code of Practice: Domestic Wastewater Treatment Systems (Population Equivalent  $\leq 10$ )* and *Wastewater Treatment Manuals-Treatment Systems for Small Communities, Business, Leisure Centres and Hotels*, (EPA, 1999) as amended.

## Wastewater treatment policies

It is the policy of Sligo County Council to:

- P-WWT-1** Co-operate with Uisce Éireann in the provision of adequate wastewater treatment capacity to support the growth of County Sligo's settlements in accordance with the Core Strategy, including:
- A.** the programme of upgrades / extensions set out in Table 30.B.
  - B.** the provision of new or upgraded WWTPs in the settlements of Cliffony, Mullaghmore, Castlebaldwin, Geevagh and Ballintogher through Uisce Éireann, Small Towns and Villages Growth Programme or any superseding programmes.
  - C.** the provision of WWTPs in the unserved settlements of Ballygawley and Rathcormac under Measure A8 of the DHLGH Circular L1-22, '*Wastewater Collection and Treatment needs for Villages and Settlements without access to Public Wastewater Services*' or any superseding circulars.
- P-WWT-2** Require sustainable collection, treatment and discharge of wastewater effluent generated within the County and ensure that effluent/sludge is treated and disposed of in accordance with the required EU standards.
- P-WWT-3** Maximise the capacity of existing collection systems for foul water by prohibiting the discharge of additional surface water to combined (foul and surface water) sewers.
- P-WWT-4** Require all new developments to connect to the public wastewater treatment plants, where capacity exists in the system.
- In cases where a settlement is not served by a public wastewater treatment plant, or where no spare capacity exists in the relevant wastewater treatment plants, proposals for single houses using on-site wastewater treatment will be considered subject to appropriate scale, site assessment, design and ground conditions, taking groundwater vulnerability into account and subject to compliance with the Habitats Directive.
- Any such permitted development shall be subject to legally binding maintenance arrangements agreed with the Planning Authority and shall be required to connect to the public wastewater treatment plant when adequate capacity becomes available.
- However, communal on-site wastewater treatment systems for multiple housing developments (i.e. systems servicing more than one residential unit) will not be permitted.
- P-WWT-5** All proposals for on-site treatment systems shall be designed, constructed and maintained in accordance with the Environmental Protection Agency's *2021 Code of Practice: Domestic Wastewater Treatment Systems (Population Equivalent ≤10)* and/or *Treatment Systems for Small Communities, business, Leisure Centres and Hotels*, (EPA, 1999) as amended, and any guidance documents issued by the County Council.

## 30.3 Surface water management

Stormwater flows can have a significant detrimental impact on the available capacity of combined sewer networks and at treatment plants. Climate change is exacerbating the impact by way of more frequent and intense rainfall. This brings challenges in terms of drainage and capacity, traditionally addressed by hard engineering options (concrete gullies, pipes, drains etc.).

Sustainable (urban) Drainage Systems, commonly known as SuDS, seek to manage surface water as close as possible to its origin by various nature-based or engineering solutions that replicate natural drainage processes. SuDS and nature-based solutions provide many benefits, such as:

- controlling the quantity of run-off to support the management of flood risk and maintain and protect the natural water cycle;
- Improving water quality by preventing pollution;
- Supporting biodiversity;
- Contributing to the visual amenity of surrounding areas;
- building resilience to climate change through micro-cooling and carbon sequestration.

The application of SuDS techniques and nature-based solutions allows surface water to be either infiltrated or conveyed more slowly to water courses, using porous surface treatments such as bioretention areas, ponds, swales, basins, rain gardens, wetlands, filter drains, green roofs etc. These are often less expensive to construct and easier to maintain than underground solutions.

The Planning Authority will require the application of SuDS and nature-based solutions in new development proposals, in the redevelopment of existing brownfield sites and proposals to extend existing developments. The use of soakaways is deemed suitable for single dwelling houses and extensions to single dwellings, but not suitable for urban areas.

While traditionally the application of SDS techniques is site-specific and depends on the site's characteristics, the Council will work with designers and developers to deliver an integrated and area-based approach where possible, so that the approach works like a mini-catchment.

## Surface water drainage policies

It is the policy of Sligo County Council to:

- P-SWD-1** Require all new developments, redevelopment of brownfield sites and extensions to existing developments (where appropriate) to provide a separate foul and surface water drainage system.
- Such developments shall connect to existing surface water drainage systems (where available) which, in the opinion of the Planning Authority, have adequate capacity to accommodate additional loading (refer also to Section 3.5 of the accompanying SFRA, “Sustainable Urban Drainage Systems and Surface Water Guidance and Strategy”)
- P-SWD-2** Require that planning applications are accompanied by a comprehensive SuDS assessment that addresses run-off quantity, run-off quality and its impact on the existing habitat and water quality.
- In the case of one-off rural dwellings or extensions to dwellings without access to existing surface water drainage systems, surface water shall be disposed of, in its entirety, within the curtilage of the development by way of suitably-sized soakaways.
- In all instances the use of nature-based solutions is preferred to engineering solutions. Developers will be required to apply the provisions of *'Nature-Based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas'* (water-sensitive urban design) Best Practice Interim Guidance Document (DHLGH, 2001) and any subsequent review.
- P-SWD-3** Seek to minimise the extent of hard surfacing and paving in all development proposals.
- P-SWD-4** Ensure that adequately designed oil interceptors are installed in all commercial developments that include car-parks or other oil- and petrol-related activities.
- P-SWD-5** Prohibit the alteration of natural and existing drainage systems, in order to preserve and protect historic drainage channels/paths and flow characteristics of existing catchments. In the case of development works, require the provision of acceptable mitigation measures in order to minimise the risk of flooding and negative impacts on water quality (including run-off, erosion and sedimentation).
- P-SWD-6** Protect the drainage characteristics of river channels and streams that can facilitate surface water drainage, by ensuring that development is kept at an appropriate distance from stream banks and/or adequate protection measures are put in place.