

SECTION 13 | THE WAY FORWARD

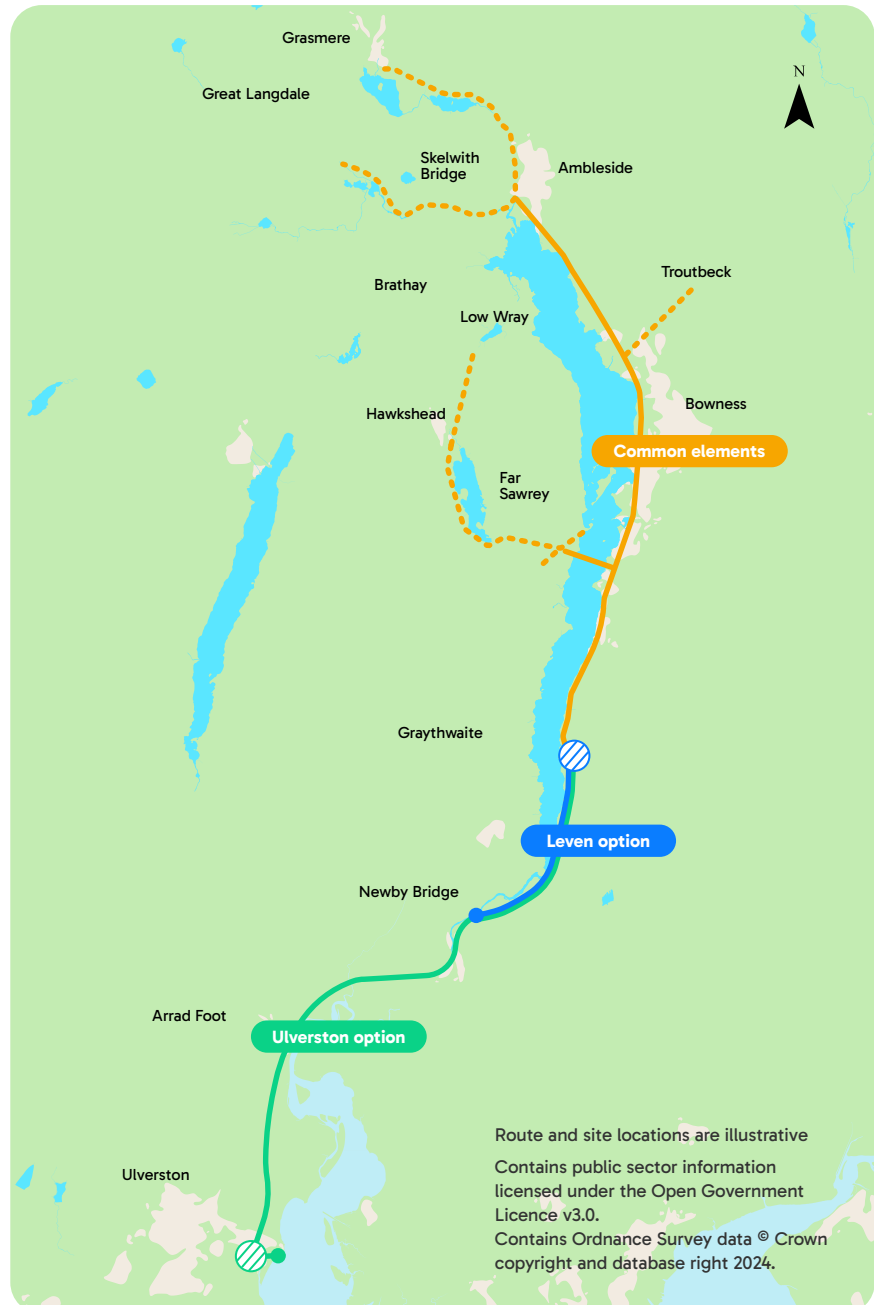
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The preferred ways forward

The year-long, multidisciplinary study has revealed that there are several feasible solutions that meet the vision of Only Rainwater into Windermere; transferring to either Ulverston or the River Leven.

Both preferred ways forward assume a step change in treatment performance through the provision of state-of-the-art wastewater treatment facilities. These facilities are upgrades of existing treatment sites, making use of United Utilities-owned land to minimise development on greenfield land and reduce overall delivery costs. Existing wastewater treatment works around Windermere could, where appropriate, be repurposed as transfer, storage or pumping assets, enabling treatment activities to be consolidated and potentially reducing the long-term operational footprint within environmentally sensitive locations.

The principal distinction between the preferred ways forward therefore relates to the location of treatment and final discharge, and the extent of transfer infrastructure required to convey flows to those locations. Both approaches require the transfer of wastewater at an unprecedented scale and would represent some of the most significant wastewater transfer infrastructure ever proposed in England, reflecting the transformational nature of the Only Rainwater into Windermere ambition. Future stages of work will focus on refining the treatment, transfer and discharge strategy to determine the preferred location for the wastewater treatment works and final discharge location.



Key

Common elements

- Gravity tunnel
- - - Single rising main or gravity network

Ulverston option

- Transfer route
- ⊗ Upgraded WwTW
- Outfall point

Leven option

- Transfer route
- ⊗ Upgraded WwTW
- Outfall point

Common factors

12,800

approximate number of people
connected to the network for the first time

77km

additional network created
for first-time sewerage

37 hectares

of sustainable drainage
installed

35km

of highway run-off
intercepted

Ulverston option

42km

of rising main

.....

19km

of tunnel

.....

£3.7bn

in construction costs*

Leven option

35km

of rising main

.....

14km

of tunnel

.....

£3.6bn

in construction costs

Benefit from investment over the life of the asset

£7.5bn

or around £1.90 for every £1.00 spent**

*Although the Ulverston solution is further down the catchment and requires additional piped infrastructure, the cost of building the enhanced treatment is less as United Utilities has an existing site with the capacity for significant expansion.

**Benefits would continue to exceed costs even at double current construction cost estimates. Whilst costs have been assured they are indicative at this point and will be matured through detailed design.