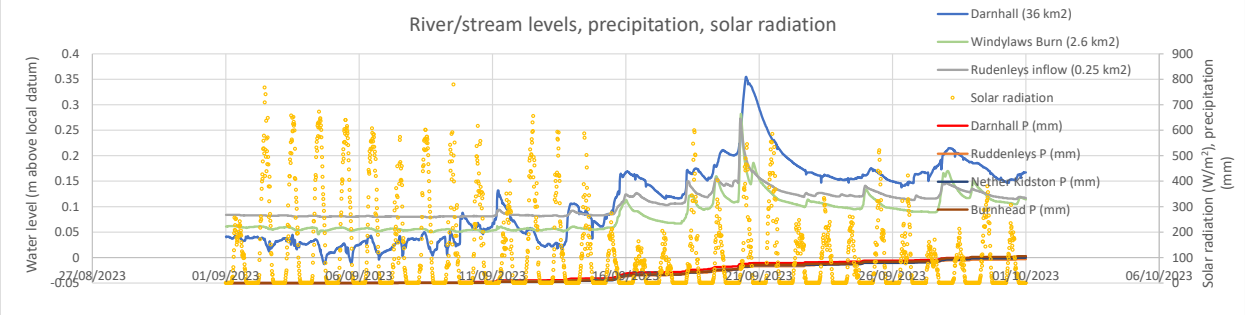
University of Dundee

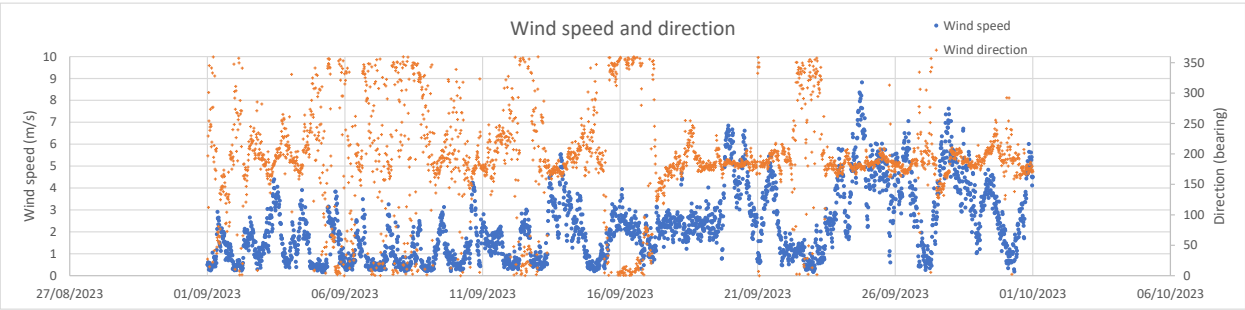
Eddleston Water Project
Monthly weather and hydrology report

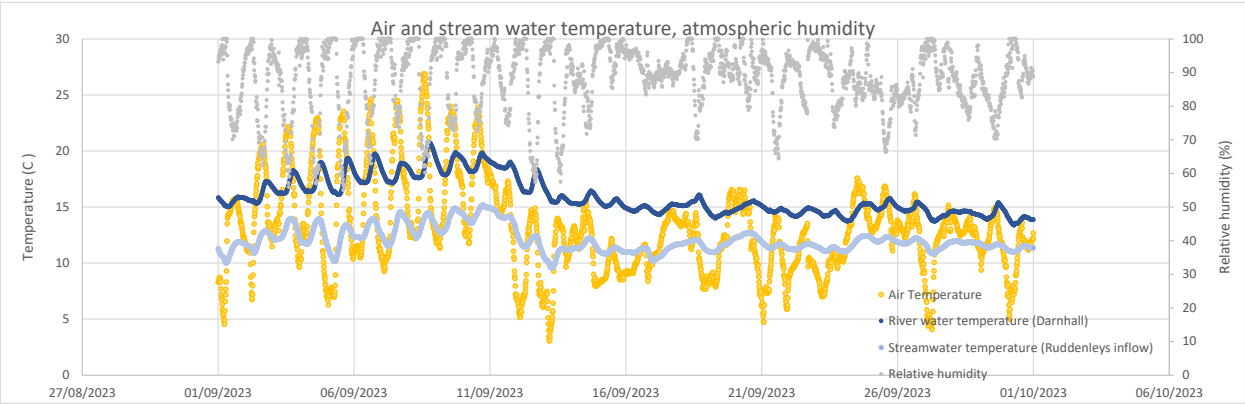
September 2023

TWEED FORUM

Monthly statistics	Hourly values				Daily values				Month	
	Max	Day/time	Min	Day/time	Max	Day	Min	Day	Average	Total
Precipitation (Darnhall Mains) (mm)	8.2	20 @ 06:00			18.8	15				104.2
Precipitation (Craigburn Farm) (mm)	8	20 @ 06:15			17.8	15				83.2
Precipitation (Wester Deans) (mm)	5.2	02 @ 18:00			11.8	2				42.6
Precipitation (Ruddenleys) (mm)	7.2	20 @ 06:00			14.4	15				93.8
Precipitation (Nether Kidston) (mm)	9.4	20 @ 06:00			20.8	15				99.6
Precipitation (Burnhead) (mm)	10.4	20 @ 06:00			19.2	15				105.6
Runoff depth (Darnhall Mains) (mm)										30.9
Air temperature (Darnhall Mains) (C)	26.7	08 @ 15:00	3.2	13 @ 05:00	18.0	10	9.3	23	13.0	
Relative humidity (Darnhall Mains) (%)									88.0	
Daily ETo evapotranspiration (mm)					2.7	6	0.6	17	1.5	43.6
Sunshine hours					10.9	4			4.0	119.4







The usual signs of autumn are seen in this September report. After a very dry first 10 days of the month, damp and cooler conditions began to be established from the 11th-13th leading to an end to the very low river levels of preceding months. After a run of 9 consecutive days with air temperatures exceeding 20 C, only one subsequent day topped 17 C. Winds were generally stronger from the 20th.

Perhaps surprisingly, the temperature drop from the 13th to the end of the month in water temperatures was almost double the drop in air temperatures when compared with the preceding 12 days: 13.0 C down to 11.5 C in the case of air temperature, but 17.6 down to 14.8 C in the water temperatures. Nothing approaching a flood.

The new addition of daily ETo evaporation estimates arises from the upgrade of climate sensor and programming upgrades.

Real-time data available at: https://hydro-data.dundee.ac.uk/eddleston

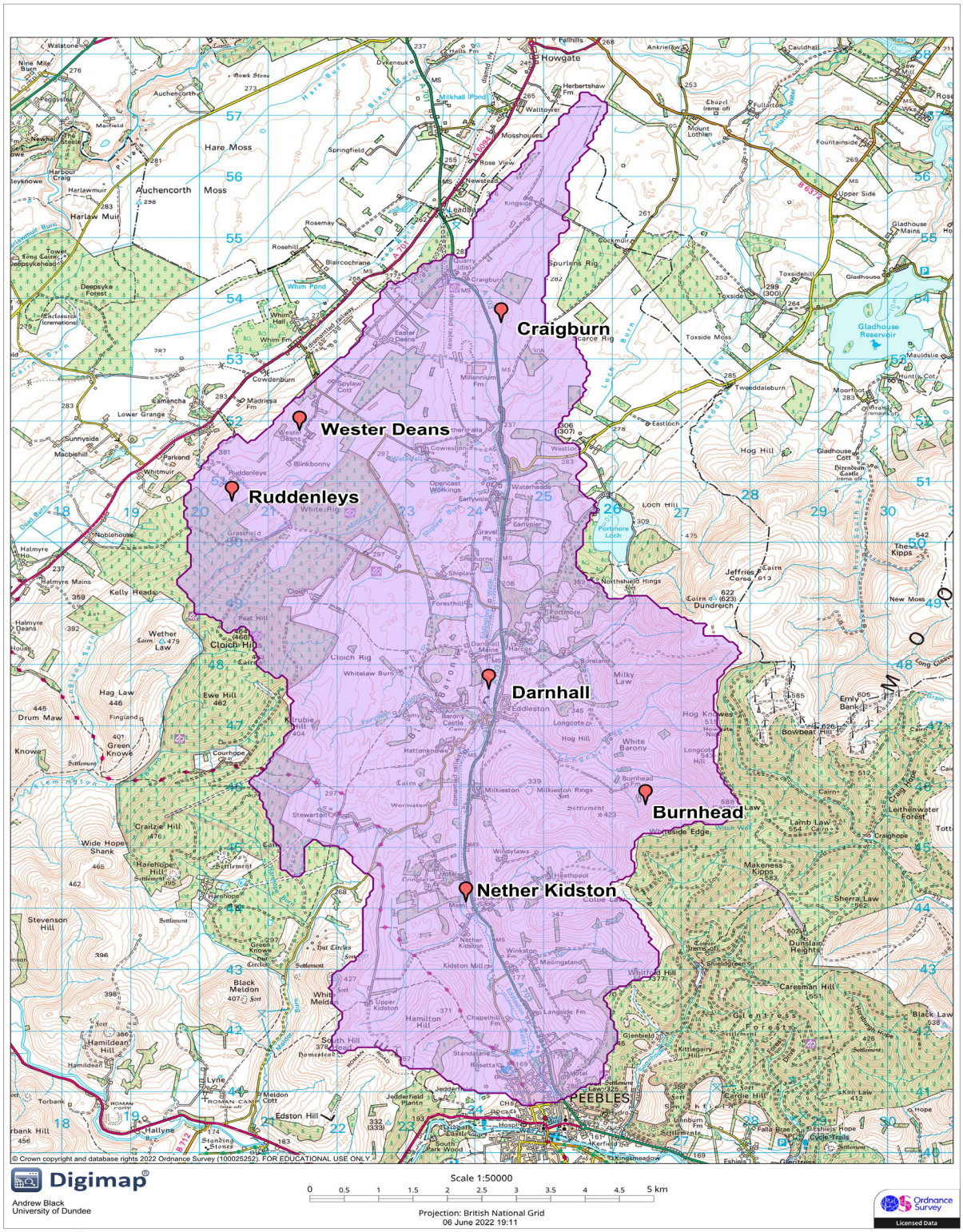
The Scottish Government

Interreg North Sea Region Building with Nature

BGS British Geological Survey

Forestry and Land Scotland | Coilltearachd agus Fearann Alba

SEPA Scottish Environment Protection Agency



The Eddleston Water Project

Funded by the Scottish Government, Interreg and the Scottish Environment Protection Agency (SEPA), this project aims to reduce flood risk and restore the Eddleston Water for the benefit of the local community and wildlife.

The project involves river re-meandering, the planting of over 300,000 trees and the creation of new wetlands. This should slow the speed and impact of floodwaters as well as creating new wildlife habitat, such as improved spawning for salmon. Our project partnership is closely monitoring the results, including any reduction in flood risk for downstream communities.

The project is a partnership initiative led by Tweed Forum, with the Scottish Government, SEPA and University of Dundee. Other key partners include British Geological Survey, Nature Scot, Scottish Borders Council, the Forestry Commission, National Farmers' Union of Scotland, the Tweed Foundation, Forest Carbon and the Woodland Trust. Tweed Forum works closely with landowners and the local community so that everyone can contribute ideas and follow the project's progress.

For more information, see: https://tweedforum.org/our-work/projects/the-eddleston-water-project/