### What are the benefits of the work completed by NI Water?

The peat which makes up the bog has been re-wetted by raising the water table. Moss, which depends on wet conditions, is starting to grow again.

With less sheep grazing, natural bog vegetation is recovering and damage caused through trampling has been prevented.

The restored bog provides a home that can support a wide variety of plants and animals including birds and plants such as hen harrier, merlin and marsh saxifrage.

We need to reduce the amount of carbon in the earth's atmosphere. Carbon is stored in peat so protecting bogs plays an important role in preventing climate change.

The water provided to Dungonnell Water
Treatment Works through the bog is no
longer discoloured and contaminated
with eroded peat particles. This makes
the treatment process at Dungonnell
Water Treatment Works more efficient
and enables us to provide high quality
drinking water for the public.

NI Water want to protect the environment and enhance biodiversity whenever possible. Work is under way to identify other areas throughout Northern Ireland where we can restore habitats and provide a home for wildlife.

Aerial photograph showing drainage channels blocked with peat dams to trap water and re-wet the bog.











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## **Co-operation Across Borders for Biodiversity**

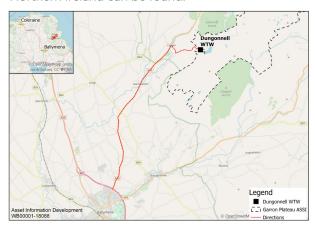


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### **Garron Plateau Blanket Bog**

Blanket bogs are formed when moss dies and rots in cold and wet mountainous areas to form peat. Peat bogs take thousands of years to form and they provide a home for wildlife including plants, insects and birds.

The Garron Plateau is an area of North Antrim where the largest blanket bog in Northern Ireland can be found.



The bog is made up from peat. The peat traps water from rainfall in the catchment area and then supplies it to the nearby Dungonnell Water Treatment Works, where the water is treated and made safe for drinking. The NI Water treatment plant at Dungonnell provides clean safe drinking water for nearly 12 thousand homes and businesses in the surrounding area.

#### Some of the wildlife found at the Garron Plateau







All over the world peat bogs are at risk. They are being drained to provide more land for farming and human use. When they are dried out in this way, the bog can be lost along with all of the plants and animals that made their home there. The bog at Garron Plateau has now been restored, benefiting biodiversity, absorbing carbon, providing wildlife habitats and helping water quality.

#### Wildlife images:

Merlin, credit Chris Comersall (rspb-images.com)
Lizard on mossy log, credit Genevieve Leaper (rspb-images.com)
Hen Harrier, credit Andy Hay (rspb-images.com)

# What were the problems at Garron Blanket Bog?

Over the years the Garron Plateau and the catchment area around the Water Treatment Works have suffered damage. In the 1960's and 1970's the bog was drained and overgrazed and it ended up in poor condition.

The following problems were causing harm to the bog and the environment:

 Too many sheep on the bog led to damage by overgrazing and trampling.

The bog was drained causing it to dry out. Peat which
was previously wet had become dry and crumbly and was
subject to erosion. Many of the plants found on the bog
were at risk of vanishing without the wet conditions they
depended on for growth.

 After drainage occurred, some of the carbon stored in the bog was released into the atmosphere, which could add to global warming.

 Water supplied by the damaged bog catchment was a dark brown colour and contained peat particles, due to the erosion taking place. This left it more difficult and costly to treat the water to a high standard at Dungonnell Water Treatment Works for drinking water supplies.

## What action has Northern Ireland Water taken to save our blanket bogs?

NI Water have worked to repair the damage done to the bog at Dungonnell and restore it to its natural condition.

We have worked with the Royal Society for the Protection of Birds (Northern Ireland) and Northern Ireland Environment Agency (NIEA) to carry out the following work:

- Excavators were brought in to "re-wet" the bog by blocking drainage channels.
- The number of sheep on the bog were reduced to better manage the habitat and avoid any overgrazing.
- A Conservation Action Plan was put in place to ensure that in future the bog will be properly managed and protected.

One of the channels that was draining the bog. Erosion of exposed peat is occurring and the water is stained dark

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