

# Collection: Coal mine water treatment

The Coal Authority's work to treat mine water has directly:

- protected and improved over 350km of rivers
- protected several important regional aquifers
- enhanced biodiversity and provided local amenity land

## **Why do we need coal mine water treatment?**

When a coal mine closes, the pumps that were used to keep the water out of the mine while the mineral was extracted are switched off and removed.

Over time the water level recovers within the mine and picks up naturally occurring minerals from the rocks, such as iron. This can coat river beds, stopping plant growth, causing wildlife to move on as they no longer have food.

## **How do we treat coal mine water?**

Typically mine water is brought to the top of a cascade structure. Water flows down these steps, which mixes in air.

The air encourages the dissolved iron in the water to become solid.

The water then flows into lagoons where the iron has time to settle at the bottom for removal.

The remaining finer iron particles are filtered out when the water passes through a series of reed beds.

[How we treat coal mine water](#)