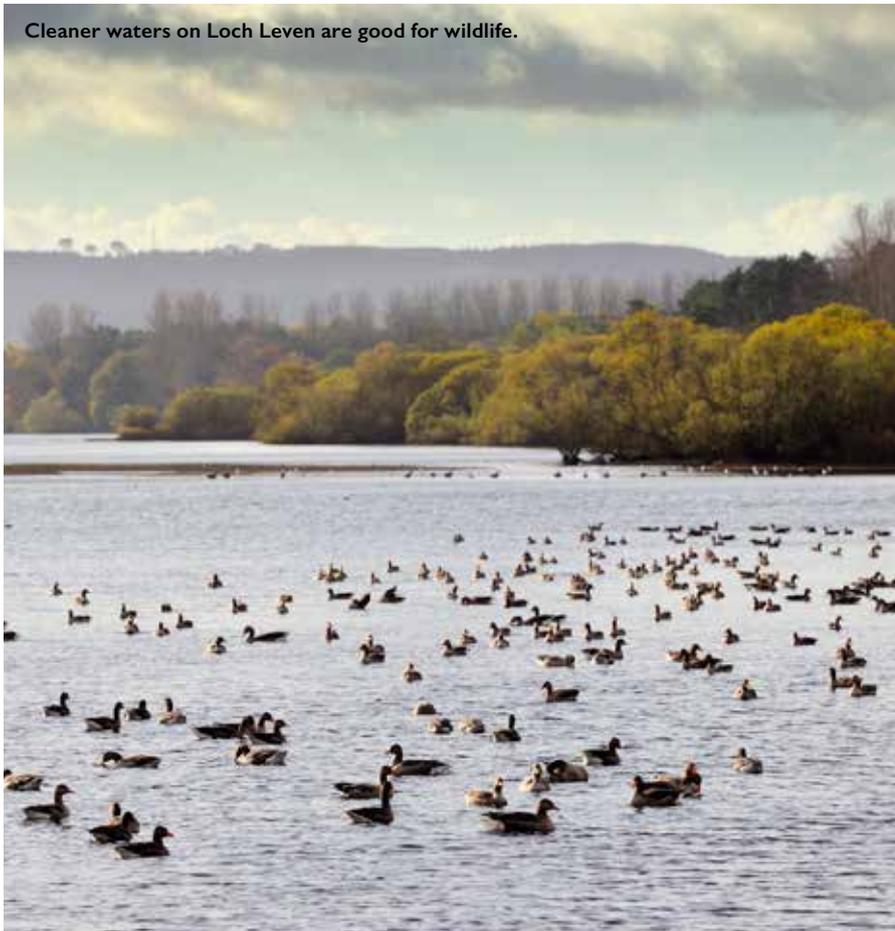


25 years of cleaner waters for Loch Leven

Cleaner waters on Loch Leven are good for wildlife.



Scottish Natural Heritage

It's 25 years since 'Scum Saturday', when a poisonous, blue-green algal bloom and murky water blighted Loch Leven and cost the local community an estimated £1 million in lost revenue. Since then, a new sewage works and upgrades to existing facilities have been combined with strict waste water treatment arrangements to improve the water quality. Local farmers and industries have made changes to ensure that pollutants aren't flowing into the loch.

NERC's Centre for Ecology & Hydrology (CEH) has been monitoring water quality in the loch for almost 50 years. For the first 20, pollution from agriculture, sewage and industry led to serious reductions in water quality. Following the management interventions, there has

been a slow and sustained recovery. CEH's Dr Linda May has led the monitoring programme for the last twenty years. She says, "The enormous improvement in water quality at Loch Leven over the last 25 years, and the associated improvements in food and habitat for wildlife, provide a world leading example of what can be achieved when scientific evidence is used to underpin restoration and management activities."

There is still work to be done, however. A recent study found that phosphorus concentrations are increasing again, and the management group is investigating possible causes.

Read more at <http://bit.ly/Leven25>

Please fasten your seatbelt

If you're afraid of flying, look away now! A new study from the University of Reading suggests that climate change could make strong turbulence twice – or even three times – as common. Turbulence causes random up-and-down motions in planes that are stronger than gravity. During severe turbulence, food service and walking become impossible, and unsecured objects get thrown around.

The study, published in *Advances in Atmospheric Sciences*, used supercomputer simulations of the atmosphere to calculate how turbulence will change over the Atlantic Ocean when there is twice as much carbon dioxide in the atmosphere – a level that is expected to occur later this century. Its results show that the average amount of light turbulence will increase by 59%, with light-to-moderate turbulence increasing by 75%, moderate by 94%, moderate-to-severe by 127%, and severe by 149%.

Dr Paul Williams, who conducted the research, said: "My top priority now is to investigate other flight routes around the world. We also need to investigate the altitude and seasonal dependence of the changes, and to analyse different climate models and warming scenarios."

Read more at <http://bit.ly/tubulenceresearch>



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