

WLC REF: MIRQ0108

**From:** [REDACTED]  
**Sent:** 15 October 2014 23:59  
**To:** wlldp  
**Subject:** Comment on Development Plan - Linlithgow

I wish to submit comment for review with respect to any plans to lift the 'restraint' on planning/development in Linlithgow.

I believe that the restraint order should not be lifted until a full evaluation of the area flood management is done and in the first instance a full flood/water impact assessment is completed.

It is clear that there are increasing pressures on the key natural attraction within the town, namely Linlithgow Loch. Over the past several years there has been an increase in the impact from blue green algae in the loch. This then results in warning signs being posted advising the general public of the dangers to humans/animals due to the bad water quality in the loch. There is high amenity use of the loch by children from West Lothian schools and other international visitors at the Low Port Centre for Outdoor Education. Clearly this facility is then impacted as well as yachting clubs and the angling fraternity when water quality in the loch fails the health and safety guidelines. A full nutrient impact assessment should be carried out on the loch.

As a member of Linlithgow Angling Club that has the brown trout fishing rights from riparian owners on various areas of the River Avon and also has the migratory fishing rights from the Crown I am concerned at the quality of water being discharged from Linlithgow Loch into the River Avon via Mill Burn and Mains Burn (a significant brown trout nursery). Our Club as members of the River Avon Federation has spent considerable volunteer time and grant monies (approx. £200,000) to improve the River Avon environs to the extent that we now have a run of migratory fish (salmon and sea trout) in the Avon, whereas some 25 years ago the water was completely devoid of any life in the Linlithgow area due to pollution from industrial (paper mills) and waste water treatment plants.

Surface water combined with sewage water is already causing regular flooding in Linlithgow town. The town central water/sewage infrastructure regularly is unable to cope with high surface run-off combined with town sewage resulting in road flooding and unknown to many in West Lothian, the activation of a Combined Sewage Outflow (CSO) directly into Linlithgow Loch.

There are two Scottish Water pipes that run one on either side of the Loch (North and South sides). These pipes meet at the west of the loch combining into a single pipe that takes the content towards the STW (Sewage Treatment Works) at Linlithgow Bridge. The combined diameter of the two pipes running along the sides of the loch is greater than the diameter of the subsequent single pipe.

There is the main town drain pipe that is a combined sewer and surface water drainage pipe. When the combined sewer and surface water exceeds the pipe capacity, there is what is referred to as a CSO (Combined Sewage Outflow) that will then take the excess and diverts it directly into the loch waters. I believe there is a filter of sorts (6mm) that is supposed to stop rags/solids from going into the loch. However contaminated water will still flow through the filter.

I understand that the chances of the sewage pipe capacity being exceeded are further enhanced by the fact that the gradient of the pipe on the south side of the loch is very low. Therefore combined with the fact that the pipe at the west of the loch is of a diameter smaller than the combined north and south pipes I assume this increases the chance of 'backing up' to the CSO and subsequent outflow into the loch.

Scottish Water uses telemetrics to monitor how often the CSO is activated. They do not monitor the volume of dirty water entering the loch from the CSO. SW can be asked to provide such statistics. For example between 13/5/13 and 13/1/14 the CSO was activated 15 times according to information provided by SW.

The CSO outflow is into the area of Town Bay. Outflow from the loch goes to the River Avon.

Clearly the concern would be the possible impact of further housing/commercial concerns that would need access to the sewage/drainage system that is clearly already unable to cope under current circumstances.

The above is my understanding and I am sure SW can correct any inaccuracies on my part. Before any further developments are approved, I believe the town flood plan, loch nutrient impact assessment and core drainage system infrastructure need to be reviewed. Results from these programmes should then be used to determine to what extent the restraint order can be relaxed.

I would like these points to be considered by WLC in this programme.

Regards

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