

11: Environmental Impact Assessment

Environmental Impact Assessment

Environmental Impact Assessment (EIA) is the process of gathering and assessing the environmental information associated with a proposed development or scheme.

An EIA aims to ensure that any potential environmental impacts that may occur during construction and following completion are properly understood and assessed before development is approved.

Appropriate measures are developed to address any identified environmental impacts. The EIA for the flood scheme is being undertaken by RPS.

Ecological Surveys

Ecological surveys have been carried out to assist in the conservation of nature throughout Kinross during and after the flood protection works.

Surveys for the following species were carried out:

- **Bats** – 4 species of bats were identified with potential roosts along the South Queich with high activity levels.
- **Otters** – during the targeted otter survey, no otter resting sites or signs of otter activity were identified. As the area is considered to have high potential to support the species for resting, foraging and commuting, the presence of otter cannot be discounted.
- **Fish** – The survey confirmed that brown trout are present in high numbers between the High Street and Loch Leven. It also noted no potential for fish in Ury and Clash Burn. Fish rescue will be required for Brown Trout in South Queich.
- **Badgers** – two potential badgers sets were found at the upstream storage area however other areas of works are unlikely to support Badger Habitat.
- **Birds** – Protected species of birds such as Pink-footed geese were identified following consultation with the RSPB. To prevent disruption works upstream will be carried out in Summer.

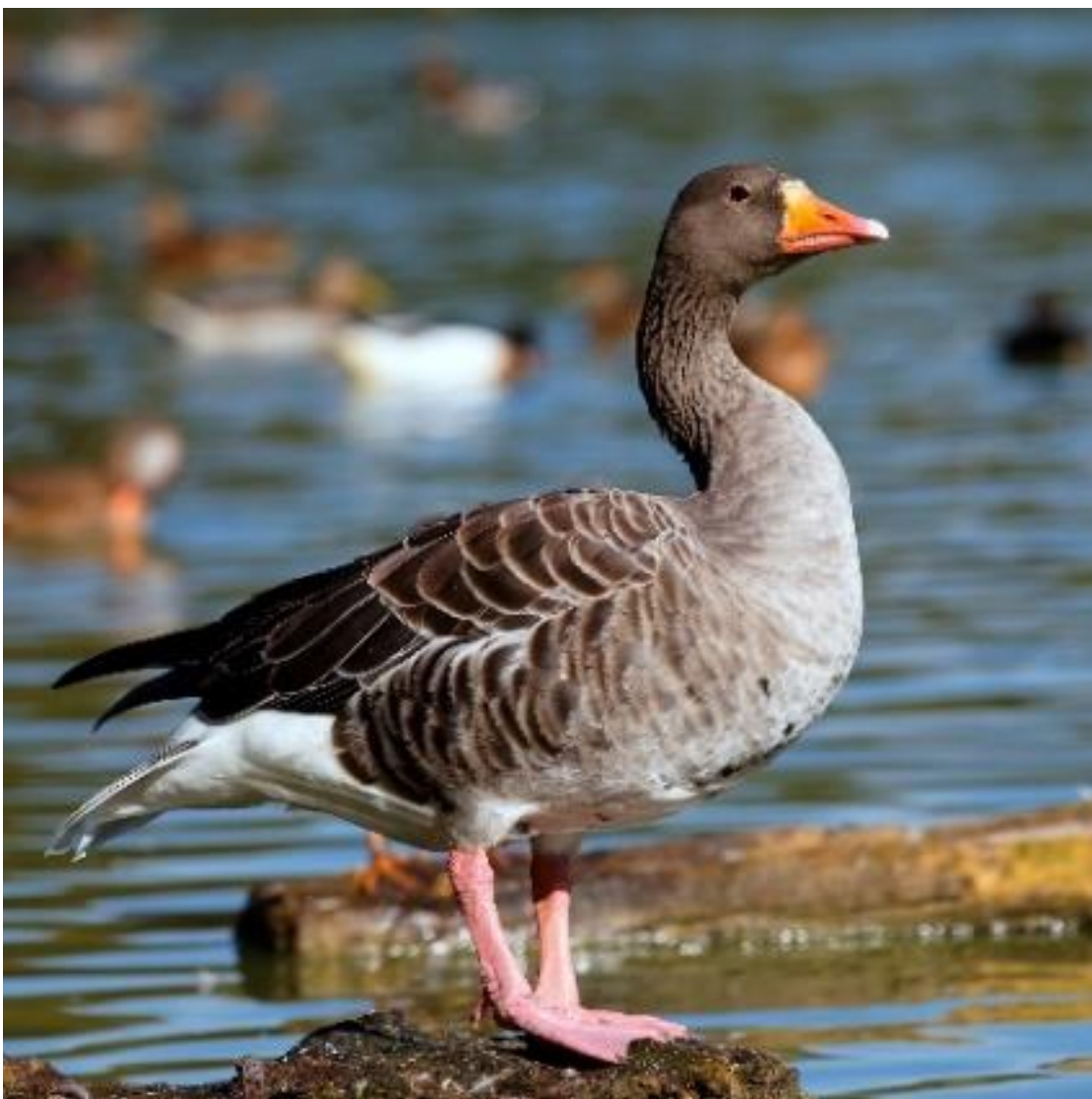


Figure 19: Pink-footed geese – protected species

Tree Replacement & Compensatory Tree Planting

A comprehensive tree survey has been carried out within Kinross to identify trees which may need to be removed to accommodate the scheme. Unfortunately, 13 tree groups and 15 individual trees require removal. The vast majority of these are Category C (low value) trees. 3 Groups are considered Category B (moderate value) trees. All trees requiring removal will be checked for breeding birds and bats.

Compensatory tree planting is proposed along the South Queich between the river and the constructed flood defences to offset losses. The existing trees to be removed are primarily self-seeded goat willow which do provide some amenity and habitat value along the watercourse, and therefore replacement trees should fulfil these benefits. Trees such as Common Alder would be planted at a range of heights including some larger specimens that would provide instant impact.

Once all the removals have been undertaken, it will be necessary to install tree protective fencing (Heras-style) in the locations identified in the Tree Removal and Protection Plan.

With the correct implementation of the protective measures, it is considered that the landscape will, in time, recover from this disturbance and these necessary works will be able to be completed without compromising the future of the landscape in Kinross.



Figure 18: Common Alder - tree replacement species

Environmental Mitigation

Proposed measures to reduce the environmental impact of the proposed scheme include:

- The design of the proposed flood defences has been carefully considered to limit impacts. The assessment has concluded that the structures do not negatively impact on the surrounding environment in terms of visual impact and public access.
- Appropriate and sensitive construction methods, including pollution control measures and a dust and emissions management plan will be undertaken. This will be particularly important to protect water quality at Loch Leven.
- The impacts on the natural landscape and heritage assets have been assessed. No change to any designated or non-designated heritage assets is expected during the construction and operation of the proposed scheme.
- Pre-construction surveys are required to ensure that construction activity avoids disturbing protected species. An Environmental/Ecological Clerk of Works (ECoW) will be appointed to oversee the implementation of ecological measures during construction.
- Invasive Non Native Species: Japanese rose, Rhododendron and Himalayan balsam have been identified which will require biosecurity protocols.
- Badger sets will be covered (under a NatureScot licence) and vehicle speeds limited on site.
- Artificial bat roosting and bird nesting habitat will be erected on trees, buildings and bridges throughout the Proposed Development where possible and works carried out in daylight hours.