

Guidance on Forestry Activities near Scottish Water Assets

September 2017

Protecting Scottish Water sources and infrastructure during forestry activities

This guidance outlines precautions that we (Scottish Water) would like to see met when forestry activities are undertaken in source water catchments and areas that contain our infrastructure (assets). Source water catchments are defined as areas that generate public drinking water supplies, including land draining to reservoirs, lochs, rivers, springs and boreholes.

Scottish Water sources provide drinking water for 97% of the Scottish public, so it is vital that forestry activities do not reduce water availability, deteriorate water quality, or cause damage to the water supply and waste water infrastructure.

Abstractions are designated as Drinking Water Protected Areas under Article 7 of the Water Framework Directive, therefore protection is required to avoid deterioration. Each water treatment works is designed according to the quality of water that supplies it, so any deterioration in water quality can affect its ability to treat water to meet drinking water quality standards and regulatory requirements.

Extra precautions around public drinking water sources

This guidance helps forest managers and practitioners understand what extra precautions should be taken in source water catchments, and near assets, to demonstrate compliance with relevant legislation; in particular the legal requirement that forestry operations must not lead to harmful or polluting substances contaminating drinking water supplies. We can also provide additional advice to help you determine site sensitivity and inform forest management plans and operations.

Guidance for pre-application discussions

Step 1: Forest managers are invited to contact us (<https://www.scottishwater.co.uk/SLM>) and provide the NGR and map of proposed woodland, to determine if it lies in a source water catchment or near our assets.

Step 2: If it does, we can confirm what extra precautions we wish to see for that particular site. Forest managers can discuss with us the appropriate risk-based measures for that site, which in turn will inform their forest management plans and operations. This discussion might consider natural and artificial drainage patterns, proposed infrastructure and protection, potential changes to water availability, and pollution mitigation measures.

Step 3: The forest/land management plan and associated work plans will now be fully informed as regards public drinking water sources and infrastructure, as it enters the formal FCS approvals process.



Figure 1: Example of a Scottish Water Catchment Map

Guidance for operations in an existing forest

Forestry operations pose particular risks to public water supplies so extra precautions are needed in source water catchments to prevent these risks occurring. Following these precautions will clearly show responsible stewardship of Scotland's drinking water sources.

Step 1: As for Step 1 above.

Step 2: If operations are in a source water catchment we can confirm what extra precautions we would like, and examples are given below. If an activity is located close to an asset, the asset must be protected from damage. Proposals will be required to comply with Sewers for Scotland and Water for Scotland, including provision of appropriate clearance distances from Scottish Water assets.

Extra precautions:

Hazardous substances

- As far as practical, undertake no refuelling, storage or handling of fuels, oils or hazardous materials within source water catchments.
- If the above is not feasible, keep a 50m buffer around all surface watercourses, boreholes and springs, within which fuel and chemicals are not stored or handled. Beyond 50m buffer areas, create dedicated fuel/chemical storage and handling areas.
- Keep a spill kit in all vehicles and plants.
- Minimise the use of fertilisers and pesticides.



Figure 2: Dedicated area

Roads and drains

- When constructing roads, drainage ditches and trenches, retain water within the existing catchment rather than directing it into an adjacent catchment.
- Manage sediment and debris, which can build up in sources reducing storage and blocking intakes.
- Minimise soil disturbance, particularly for organic-rich soils.
- For water-bound roads and tracks, avoid using material resulting in metallic, sulphide-rich or strongly acidic polluted water run-off, ideally using inert materials with low erodibility.
- Regularly maintain site roads and access routes to minimise erosion, run-off and pollution.



Figure 3: Sediment management

Near infrastructure

- Identify the location of assets, such as water and waste water pipes, and clearly mark them on site.
- Provide sufficient buffers from the asset. The width of the buffer will vary according to the asset type and we will provide guidance on this.
- Proposals should comply with Water for Scotland Edition 3 (in particular section 2.3.10) and Sewers for Scotland (in particular section 2.14.10).
- If crossing a pipeline is unavoidable, use log bridges, steel plates, etc.



Figure 4: Log Bridge over a water pipe

Please see our website for links to relevant documentation:
<https://www.scottishwater.co.uk/SLM>

In the event of an incident, notify Scottish Water immediately to avoid serious harm to human health or infrastructure **0800 0778 778**