

Biosecurity in schemes including Natural Flood Management interventions.

This guidance note sets out measures to avoid the spread of invasive non-native species, diseases and pathogens when undertaking and managing schemes that include Natural Flood Management interventions.

What is biosecurity?

Non-native species can be spread in a variety of ways, for example in water, on clothing, equipment or other materials. Visits to a water body create a real risk that harmful organisms could be spread unless good biosecurity practice is followed.

Biosecurity means taking steps to make sure that good practices are in place to reduce and minimise the risk of spreading invasive non-native species, diseases and pathogens. Considering biosecurity is always essential, even if invasive non-native species are not always apparent.

Why is it important?

The spread of invasive non-native species, pathogens and diseases presents a very significant risk to our environment and economy. The Environment Agency is required to lead by example and adopt effective biosecurity control measures.

Invasive non-native species, diseases and pathogens can be spread on contaminated footwear, PPE and equipment. This is especially relevant in aquatic environments where invasive species can survive for significant periods of time in damp conditions.

How does it apply to Natural Flood Management (NFM)?

Biosecurity is essential for any activity in and around rivers and wetlands. NFM interventions are often in headwaters of rivers and catchments, in rural catchments with few to no invasive species, or in farmland or forestry vulnerable to pathogens. In many cases, protected species such as white clawed crayfish and vulnerable populations of other species such as fish or rare plant communities can be present. Damaging organisms that establish in the headwaters are at a greater risk of spreading throughout the catchment.

By their nature, NFM interventions cause habitat change and disturbance which creates a vulnerability to new invasions. New schemes and associated interventions are at particular risk of an invasive species, diseases or pathogens establishing successfully if introduced.

NFM sites are often visited by a wide range of people from around the country who may be arriving with footwear and equipment which isn't clean. There is therefore a high risk that existing and new NFM sites are at risk of having a damaging organism introduced from another catchment and establishing successfully. This can be avoided by requesting and ensuring that good practice is followed.

What practices need to be followed?

Good biosecurity should be followed by everyone undertaking site visits. It is important to ensure that these measures are incorporated into site visit information, contracts and collaborative agreements.

Good biosecurity is achieved by following the principles outlined in the [Check, Clean, Dry](#), especially:

- Ensuring sites have the appropriate equipment and designated areas for biosecurity;
- Ensuring that staff, contractors and visitors are aware of what biosecurity measures they are required to do when arriving and leaving the site;
- Arriving at the site with clean footwear and vehicles. Check whether additional disinfection will be necessary prior to visiting the site (ie: if White clawed crayfish are present).
- Ensuring footwear is clean (visually from soil, and debris) before leaving the site.
- Ensuring vehicles are kept clean - in particular remove any accumulated mud before leaving the site.
- Making use of facilities provided on the site to clean footwear/equipment.
- Keeping access to a minimum and avoiding areas that are known to be infested with invasive species.
- If practical do not take vehicles onto premises, keep to established tracks and park vehicles on hard standing.
- Where possible avoid areas of livestock and areas with known plant disease.
- Planning visits so that the most risky visit is the last one of the day.

What further measures can be taken?

Biosecurity and avoiding the spread of invasive non native species should also be considered when planning a scheme that includes NFM interventions. In particular, the risk of invasive species, diseases and pathogens establishing on the site should be identified as a risk within the risk register for the project, and appropriate mitigation measures such as producing biosecurity protocols put in place.

Including the identification on invasive species can also be included in post-project monitoring, which can enable a rapid response to eradicate a newly established species from the site.

Further information

Further advice and information is available through the [ISAG sharepoint site](#) and the Invasive Species and Biosecurity Network Yammer group.). Local Fisheries, Biodiversity and Geomorphology teams can also provide advice and information where needed.

Elearning on biosecurity and invasive non-native species recognition is available from the [NNS website](#). Guidance on field biosecurity is available [here](#).

Guidance on how to avoid the introduction and spread of tree pests and diseases, including a link to phytosanitary biosecurity elearning, is available on the [GOV.UK website](#).

customer service line **03706 506 506**

floodline **03459 88 11 88**

incident hotline **0800 80 70 60**

Page 2 of 2