

SECTION 2 NPI Farm Infrastructure

Culverts

Objectives

To provide a safe drain crossing point for livestock, people, and vehicles to cross drains without fording them and prevent regular discharges of sediment and nutrients to watercourses via man-made drains.

Background

The passage of animals, people and vehicles across drains damages banks and aquatic vegetation. This increases the risk of soil particles and plant nutrients entering the drain and being transported downstream to a stream or river.

Site Suitability

- This action can only be selected on parcels with an Eligible hectare > 0.
- This action is available on CP parcels only that will be claimed by the participant for the remainder of the ACRES contract.
- This action can only be selected on fields that have a scorecard submitted and is available on any scorecard.
- Culverts are suitable for the safe passage of livestock, people, and vehicles across lands drains with small catchments and gentle slopes. Culverts may not be able to cope with peak flows on drains with large catchments, particularly on steeper slopes. There is a risk that water may back up behind the culvert and spill out on to adjoining land or overtop the culvert.
- Culverts are not permitted on natural watercourses (incl. OSI waterline and Single Stream line) or on arterial drainage channels. The CP Team will check the suitability of the proposed culvert location and arrange for consent if required. Naturalised drains will need to be checked by the CP team.
- Proposed Culverts in close proximity to High Status Water Bodies, to known Freshwater Pearl Mussel sites or National Monuments will be visited by the CP team prior to approval.

Requirements

1. Install a Culvert in the selected location by placing reinforced plastic or concrete pipes with a minimum diameter of 375mm in the drain and cover with clean stone to create the crossing.
2. The location must be identified on the LPIS parcel(s) and marked on the map submitted. Each culvert applied for is only eligible for one NPI payment and once claimed must be retained for the remainder of the ACRES contract.

3. Dredging of channel must be minimised prior to works and must only occur in sections of the drain where the culvert is to be inserted.
4. No blasting or rock breaking is permitted for the delivery of this action.
5. The use of herbicide/pesticide for site preparation is not permitted.
6. Culverts must be monitored to ensure they are clear of debris and should be checked after heavy rainfall.

Additional Guidance

- Even though dredging of channel must be minimised, if a culvert is proposed within 30m of a watercourse/excluded habitat, a sediment trap should be installed every 10m downstream of the excavated culvert site.
- Silt traps or temporary check dams should be installed within 30 metres downstream of the culvert. These must be kept in place for at least three months after the installation of the culvert. When they are no longer needed, they must be removed, and any accumulated sediment cleaned out and spread on suitable land at least 30 metres from a drain or watercourse.
- It is recommended to attend Specialist Water Quality Training Courses in your area coordinated by CP Teams, which will go into detail on hydro morphological Landscape Actions and water related NPIs.
- Works should only be carried out when ground conditions are suitable for the passage of machinery. To avoid disturbance to wildlife and the loss of sediment which may impact on downstream salmonid spawning beds, works should be restricted to August and September.
- If scrub clearance is necessary, then it should occur only outside of the bird nesting season and be limited to the area around the culvert.
- A single large diameter pipe is preferable to multiple pipes with a smaller diameter.
- Any changes in livestock density or substantial change of use should be discussed with farm advisor. The passage of livestock should be controlled as the culvert could become a choke point where regular passage of stock contributes to poaching close to a drain.
- Do not import material from sites where there is a risk of infestation with invasive species.
- Excavated soil at the point of installation should be reused appropriately on the same land parcel.
- The use of crushed limestone is not recommended on bog or heath.
- Waste material should be disposed of appropriately.