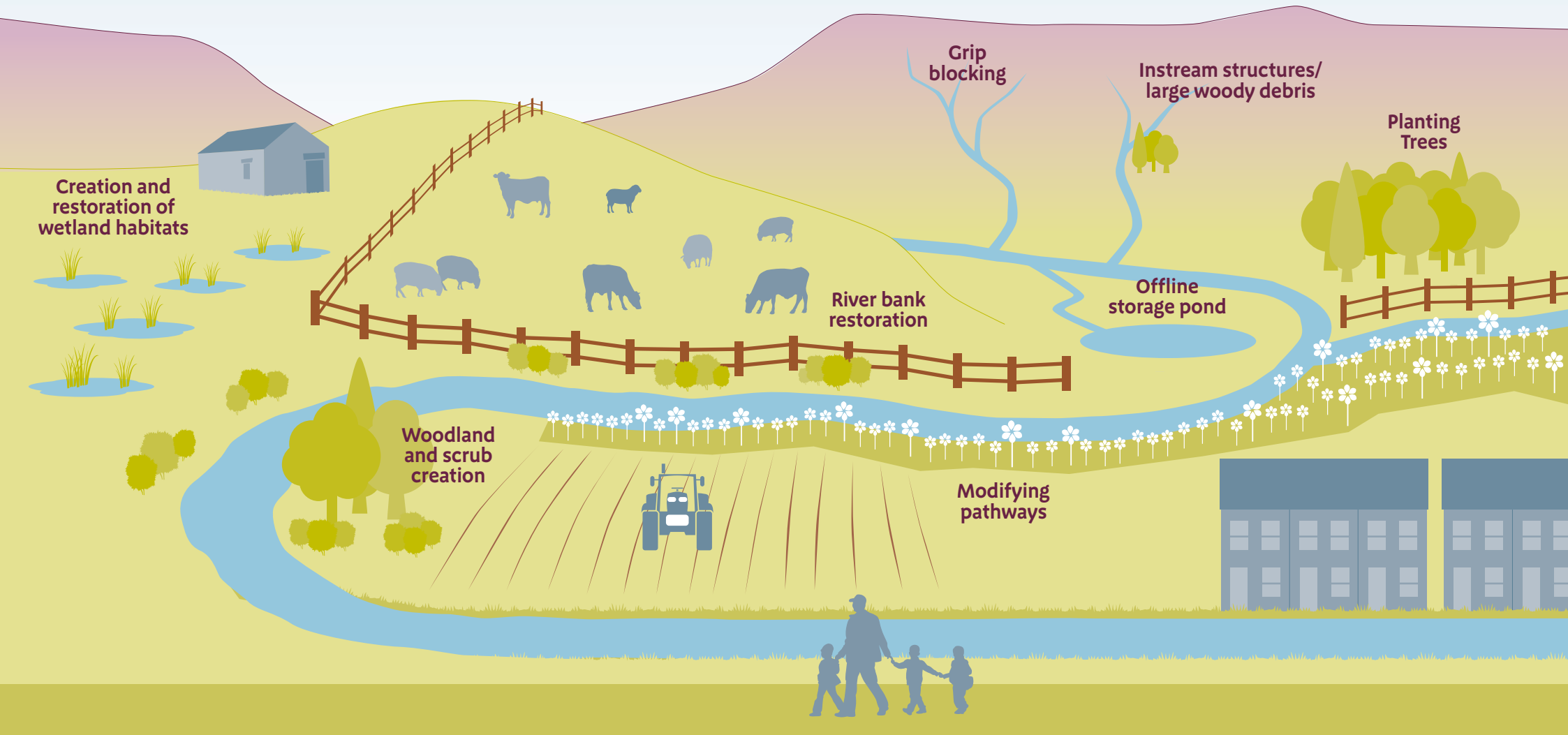


# Countryside Stewardship

## How can it help reduce flooding?



There are a range of grants available under the Countryside Stewardship scheme to support farmers and land managers who wish to adopt a variety of natural flood management techniques and help slow the flow of water within a catchment and to reduce the impact of flooding downstream.

For more information visit [www.gov.uk/countryside stewardship](http://www.gov.uk/countryside stewardship)

# Countryside Stewardship

## How can it help reduce flooding?



Department  
for Environment  
Food & Rural Affairs



The European Agricultural  
Fund for Rural Development:  
Europe investing in rural areas



### Woodland and scrub creation

#### **Planting and managing woodland areas at a range of scales throughout the catchment.**

CS includes a range of woodland and scrub creation and management options (WD1- 9) and associated capital items to plant and protect young trees, and manage existing mature trees along river banks (TE4-6 – supply and plant tree /tree guards & shelters TE 10 – coppice bank side trees).

### Grip blocking

#### **Modifications to agricultural drainage systems to reduce runoff and to improve the condition of peatlands.**

CS has a capital item for grip (upland drain) blocking - WN1. There are also management payments for upland moorland – UP3, for modifications to existing moorland burning regimes –UP4 and a supplement for moorland re-wetting – UP5.

### River bank restoration

#### **Stabilising eroding river banks to reduce deposition of sediment downstream.**

CS capital items are available for stock fencing to allow river bank restoration – (FG1 & 2). There are also management payments available to restore riparian zones along river banks –water course buffers on arable land (SW4), riparian management strip (SW11), and taking field corners out of management (CS1).

### Instream structures/large woody debris

#### **Using woody material or boulders in a natural channel to slow the flow, increase instream water levels during moderate to high flows, and thereby increase water storage on the floodplain.**

CS capital items such as check dams (RP12) provide this type of instream structure.

### Wetlands

#### **Creating wetlands can help to reduce and slow down runoff and capture sediment.**

CS has a number of management options for raising water levels and creating habitats that should include areas of standing water. These include making space for water (SW12), pond and reedbed creation management (WT4 -7), creation and management of wet grassland for breeding and wintering wader and wildfowl (GS9-12).

There are also a number of relevant capital items for creation of scrapes (WN2), creation of water penning features (WN10), constructed wetlands for the treatment of pollution (RP8)

### Overland sediment traps

#### **Sediment laden runoff is detained to allow sediment to settle out.**

CS has a number of capital items relating to this measure – sediment ponds and traps (RP7), RP9 (earth banks and soil bunds), silt infiltration dams/seepage barriers (RP10), swales (RP11). Other capital items such as resurfacing gateways/gateway relocation (RP1 & 2), cross drains (RP5), watercourse crossings (RP3) and installing piped culverts in ditches (RP6) may also be useful.

### Offline storage ponds and washlands

The making space for water (SW12) and the creation and management of wet grassland options for breeding and wintering waders and wildfowl (GS9 - 12) are the main CS options for this measure. Capital items such as the construction of water penning features (WN10) and sluices (WN9) can also contribute.

### Land and soil management practices – modifying pathways

CS land management options that might slow the pathway for water entering watercourses by ensuring that more vegetation is present (and at an advantageous orientation) compared with typical cropping regimes for example:

- AB1 Nectar flower mix
- AB3 Beetle banks
- AB8 Flower rich margins and plots
- AB9 Winter bird food
- AB16 Autumn sown bumblebird mix
- OP2 Wild bird seed mixture
- SW1 4-6m buffer strip on cultivated land
- SW3 In-field grass strips
- SW4 12-24m watercourse buffer strip on cultivated land
- WT2 Buffering in-field ponds and ditches in arable land

CS capital items are available for hedgerow gapping up and creation (BN7 & 11) may also be relevant in some circumstances.

### Land and soil management practices – beneficial land use change (temporary)

CS options can contribute to flood management by selecting options that increase the chance of infiltration rather than run-off. Relevant options include:

- AB2 Basic overwinter stubble
- AB6 Enhanced overwinter stubble
- AB15 Two year sown legume fallow
- OP1 Overwinter stubble (organic land)
- SW5 Enhanced management of maize crops
- SW6 Winter cover crops

### Land and soil management – beneficial land use change (at least 5 years)

CS options can assist with beneficial land use change (see above for woodland) on arable land that can slow the movement of water and increase the rate of infiltration. For example:

- SW7 Arable reversion to grassland with low fertiliser input
- WT7 Creation of reedbed
- WT9 Creation of fen