CASE STUDY

Preserve and improve water's edge and bank side habitats

Project Summary

Title: Good and bad back gardens
Location: Applied throughout England by the Environment Agency via the Operations Maintenance Standards
Technique: Consideration of the river for residential developments
Cost of technique: £
Cost of overall scheme: N/A
Benefits: £££
Dates: works should be timed to minimise environmental impact (e.g. bird nesting season)

Mitigation Measure(s)

Preserve and improve water's edge and bank side habitats

How it was delivered

Delivered by: Riparian owners
Partners: Partners relevant to watercourse in question

(1) Poorly laid out gardens

(2) Well laid out gardens

CASE STUDY

Background / Issues & Step-by-step

Riparian land owners can design their gardens to reduce the impacts of flooding to their gardens and communities whilst improving the river corridor for wildlife.

Poorly laid out gardens (See 1) can have the following effects:

- In heavy rainfall, fences across streams can block the rising water causing levels to increase upstream. They also trap any debris and if the fence breaks, a lot of water can suddenly be released.
- A smooth channel bed and banks will increase the speed of the flowing water. This fast moving water can be deceptively dangerous but may also increase the flooding downstream.
- Decking should not be in the stream. Supporting posts near the stream can easily trap debris and block the stream, flooding your garden.
- Fencing built alongside the stream stops excess water spreading and causes the water level to rise. Fences can be pulled down by flood water and block the stream.
- Drains flowing straight into the stream add to the flood waters.
- Waste stored near the stream can be washed away during a flood. This can end up in neighbouring gardens or get blocked on bridges causing flooding and will frequently cause flooding when trapped on bridges or bends.

Well laid out gardens (See 2) can have the following outcomes:

- Provides habitat for plants and animals.
- Placing a fence at the top of a bank allows the stream to rise and fall without causing damage.
- A bridge that allows a larger volume of flood water underneath it will reduce the risk of blockages.
- Removing fences that cross the stream means the water level can rise and fall without causing blockages. Security can be achieved by fencing gardens or building fences at the main bridges.
- Moving decking further back from the channel means that people can enjoy the views of their stream and will not trap debris.

Benefits & Lessons Learnt

- Preserves riparian habitat.
- Reduces bed and bank erosion.
- Helps manage sediment by trapping runoff and resucing its input to a watercourse.
- Can improve water quality by intercepting point source pollution.

Project contact: Environment Agency, Partnerships & Strategic Overview Teams.