

Soil Erosion and Diffuse Water Pollution Mitigation



Moving from left to right, start with your farm type, then select the soil type for a particular field followed by the main climate description for your area, then read off the suggested mitigation strategies.

Soil Type/Texture

Light: generally sand, loamy sand, sandy loam and sandy silt loam textures with less than 18% clay

Medium: generally sandy clay loam, clay loam, silt loam and silty clay loam textures with between 18% and 35% clay

Heavy: generally sandy clay, silty clay and clay textures with above 35% clay

Climate description		Mitigation Cost	
Wet	Rainfall >1000mm	low cost (<£250 in total or <£50/ha)	medium cost (<£500 in total or <£150/ha)
Dry	700 to 1000mm	high cost (>£500 in total or >£250/ha)	

Farm Type	Soil Type	Climate	Mitigation
Arable (Cereals)	Light	Wet	Regulatory requirement for no cultivation within 2 m of a water course
			Increase soil organic matter (e.g. plough in cereal stubbles, retain crop residues)
			Introduce cover crops into the rotation
			Tramline management
	Light	Dry	Regulatory requirement for no cultivation within 2 m of a water course
			Increase soil organic matter (e.g. plough in cereal stubbles, retain crop residues)
			Introduce cover crops into the rotation
			Re-instate and establish new hedges
	Medium	Wet	Regulatory requirement for no cultivation within 2 m of a water course
			Reduce traffic in wet conditions
			Conservation tillage
			Introduce cover crops in to the rotation
Medium	Dry	Regulatory requirement for no cultivation within 2 m of a water course	
		Increase soil organic matter (e.g. plough in cereal stubbles, retain crop residues)	
		Conservation tillage	
		Introduce cover crops into the rotation	
Heavy	Wet	Regulatory requirement for no cultivation within 2 m of a water course	
		Conservation tillage	
		Reduce traffic in wet conditions	
		Introduce cover crops in to the rotation	
Heavy	Dry	Regulatory requirement for no cultivation within 2 m of a water course	
		Increase soil organic matter (e.g. plough in cereal stubbles, retain crop residues)	
		Conservation tillage	
		Introduce cover crops into the rotation	
Root Crops	Light	Wet	Regulatory requirement for no cultivation within 2 m of a water course
			Increase soil organic matter (e.g. retain crop residues)
			Tramline management
			Cultivate soils in spring not autumn, including slurry and manure incorporation
	Light	Dry	Regulatory requirement for no cultivation within 2 m of a water course
			Increase soil organic matter (e.g. retain crop residues)
			Introduce cover crops into the rotation
			Re-instate and establish new hedges

Root Crops (contd)	Medium	Wet	Regulatory requirement for no cultivation within 2 m of a water course Suitable crop for soil texture and slope of the field Conservation tillage Tramline management Cultivate soils in spring not autumn, including slurry and manure incorporation Grass boundaries or buffer/filter strip, especially at the bottom of slopes
		Dry	Regulatory requirement for no cultivation within 2 m of a water course Suitable crop for soil texture and slope of the field Increase soil organic matter (e.g. retain crop residues) Timing of agricultural practices – keep off tramlines after heavy rainfall Introduce cover crops into the rotation Cultivate soils in spring not autumn, including slurry and manure incorporation
		Wet	Regulatory requirement for no cultivation within 2 m of a water course Suitable crop for soil texture and slope of the field Reduced traffic in wet conditions to reduce soil compaction Tramline management Cultivate soils in spring not autumn, including slurry and manure incorporation Grass boundaries or buffer/filter strip, especially at the bottom of slopes
		Dry	Regulatory requirement for no cultivation within 2 m of a water course Suitable crop for soil texture and slope of the field Timing of agricultural practices – keep off tramlines after heavy rainfall Tramline management Cultivate soils in spring not autumn, including slurry and manure incorporation
	Heavy	Wet	Regulatory requirement for no cultivation within 2 m of a water course Suitable crop for soil texture and slope of the field Reduced traffic in wet conditions to reduce soil compaction Tramline management Cultivate soils in spring not autumn, including slurry and manure incorporation Grass boundaries or buffer/filter strip, especially at the bottom of slopes
		Dry	Regulatory requirement for no cultivation within 2 m of a water course Suitable crop for soil texture and slope of the field Timing of agricultural practices – keep off tramlines after heavy rainfall Tramline management Cultivate soils in spring not autumn, including slurry and manure incorporation
		Wet	If needed move feeders and water troughs to reduce extensive soil damage Increase soil organic matter with manures Soil compaction alleviation e.g. spiking, sward lifting (depending on depth of compaction) Reduce field stocking rates when soils are wet Fence off livestock from rivers and streams, create more water points in the field Use bridges for animal movements across streams
		Dry	If needed move feeders and water troughs to reduce extensive soil damage Increase soil organic matter with manures Strip graze across the slope Fence off livestock from rivers and streams, create more water points in the field Use bridges for animal movements across streams
Grassland	Light	Wet	If needed move feeders and water troughs to reduce extensive damage Avoid poaching and surface capping by reducing grazing in wet conditions Soil compaction alleviation e.g. spiking, sward lifting (depending on depth of soil compaction) Reduce field stocking rates when soils are wet Fence off livestock from rivers and streams, create more water points in the field Use bridges for animal movements across streams
		Dry	If needed move feeders and water troughs to reduce extensive damage Avoid poaching and surface capping by reducing grazing in wet conditions Soil compaction alleviation e.g. spiking, sward lifting (depending on depth of compaction) Fence off livestock from rivers and streams, create more water points in the field Use bridges for animal movements across streams
	Medium	Wet	If needed move feeders and water troughs to reduce extensive damage Avoid poaching and surface capping by reducing grazing in wet conditions Soil compaction alleviation e.g. spiking, sward lifting (depending on depth of soil compaction) Reduce field stocking rates when soils are wet Fence off livestock from rivers and streams, create more water points in the field Use bridges for animal movements across streams
		Dry	If needed move feeders and water troughs to reduce extensive damage Avoid poaching and surface capping by reducing grazing in wet conditions Soil compaction alleviation e.g. spiking, sward lifting (depending on depth of compaction) Fence off livestock from rivers and streams, create more water points in the field Use bridges for animal movements across streams
	Heavy	Wet	Avoid poaching and surface capping by reducing grazing in wet conditions Soil compaction alleviation e.g. spiking, sward lifting (depending on depth of compaction) Reduce the length of the grazing periods during wetter months Reduce field stocking rates when soils are wet Fence off livestock from rivers and streams, create more water points in the field Use bridges for animal movements across streams
		Dry	If needed move feeders and water troughs to reduce extensive damage Avoid poaching and surface capping by reducing grazing in wet conditions Soil compaction alleviation e.g. spiking, sward lifting (depending on depth of compaction) Reduce the length of the grazing periods during wetter months Fence off livestock from rivers and streams, create more water points in the field Use bridges for animal movements across streams