Freshwater habitat priorities and potential measures

A potential measure is the proposed action to deliver the priority. They must be practical and achievable. Potential measures mapping identifies where the action determined as necessary for our nature recovery priorities should be strategically targeted to achieve the greatest gains for biodiversity and deliver the widest environmental benefits. It is only potential measures that are eligible for the biodiversity net gain strategic significance uplift – and only when those potential measures are delivered in the areas they have been mapped to.

Priority habitat	Potential measure reference number	Potential measure	Principle delivering against	Delivery preference
FW1 – Rivers (naturalising)	FW1.2	Undo historical physical modifications which have disconnected rivers and floodplains and restore natural processes through a range of approaches, including supplying woody material and allowing it to remain in the channel where it is not causing a flood risk, restoring channel stage zero, restoring historic meanders, bed raising, regrading banks to create shallow edges, and establishing mosaics of water meadows, wet grasslands and wet woodlands to allow inundation of floodplains above Q10 flows.	Bigger	2
	FW1.3	Restore a more natural shape of channels by narrowing overwide channels, especially where siltation, uniform and low flows, and lack of habitat diversity are a pressure.	Bigger	2
	FW1.4	Open up and daylight culverted rivers, streams and ditches, including ephemeral/seasonal streams where modification is redundant.	Bigger	2

Priority habitat	Potential measure reference number	Potential measure	Principle delivering against	Delivery preference
FW2 – Rivers (clean)	FW2.4	Prevent road runoff entering rivers by installing sustainable urban drainage systems or similar nature-based interception features on highways and local roads.	Nature-based solutions	5
FW3 – Rivers (supply)	FW3.2	Retain and enhance habitats that support infiltration, such as grasslands, woodland, reedbeds and lowland peat. Avoid reducing infiltration in key recharge areas and around chalk stream winterbournes.	Bigger	2
	FW3.3	Slow the flow and store water in the catchment in areas of low agricultural productivity or where there is space in urban areas, by working with natural processes to implement natural flood management e.g. by installing large woody material, and creating wet woodlands, lowland meadows, reedbeds, flood attenuation ponds and similar, especially where they can reduce flood risk and provide clean recharge to the groundwater body.	Nature-based solutions	5
FW4 – Rivers (buffers)	FW4.1	Establish and maintain wide areas of semi-natural, complex habitats along the banks of rivers and streams (including seasonal and headwater reaches), allowing light grazing of wet grassland areas with a focus on native livestock breeds, and encouraging woodland, particularly where there is a need for more shading of rivers to provide cooler temperatures, by increasing riparian tree cover to 30%. Allow the natural regeneration of habitats and recolonisation.	Bigger	2
	FW4.2	Use the redevelopment of old infrastructure as an opportunity to re-naturalise river corridors (e.g. old industrial sites).	Nature-based solutions	5

Priority habitat	Potential measure reference number	Potential measure	Principle delivering against	Delivery preference
	FW4.3	Combine buffers with the use of nature-based solutions to hold water on floodplains in areas upstream of communities at risk of flooding, and clean water. This could include, for example, large woody debris, sediment traps and floodplain wetlands.	Nature-based solutions	5
FW5 – Headwater streams	FW5.2	Restore and establish wetlands in headwater areas and around natural springs by reversing and preventing further drainage of springs and seepage areas.	Bigger	2
	FW5.3	Re-naturalise urban and modified sections of headwaters, including ephemeral streams such as winterbournes, (e.g. where they have been straightened and deepened to drain woodlands and agricultural land), including through approaches such as stage 0 restoration.	Bigger	2
FW7 – Lowland mire sites (fen and valley mires)	FW7.1	Manage existing fen and bog sites to reduce encroachment, including through scrub management and appropriate grazing.	Better	1
	FW7.2	Create and maintain wide buffers around existing fen and bog sites to safeguard them from diffuse pollution.	Bigger	2
	FW7.3	Restore lowland peat habitats by reversing drainage and supporting re-wetting of areas.	Bigger	2
FW9 – Freshwater wetlands	FW9.1	Enhance reservoirs and similar waterbodies to provide a better wildlife habitat. Ensure that any such water bodies include features that enable wildlife to get out of the water.	Better	1

Freshwater priorities and wider measures

Wider measures are proposed actions which would be similarly beneficial over wide areas or those where it was not possible to determine specific locations to carry out the proposed action. Collectively, these wider measures identify areas of additional opportunities for nature recovery but do not form a part of the formal Strategy's local habitat map. Wider measures are NOT eligible for the biodiversity net gain strategic significance uplift – this only applies to potential measures.

Priority habitat	Wider measure reference number	Wider measure	Principle delivering against	Delivery preference
FW1 – Rivers (naturalising)	FW1.1	Monitor, manage, control expansion and remove invasive species from ponds, lakes, wetlands, rivers and streams and lowland drains.	Better	1
	FW1.5	Increase longitudinal connectivity in rivers by removing redundant barriers and making any remaining barriers passable for fish, riverine mammals and natural sediment.	Connected	4
	FW1.6	Support the delivery of protected freshwater sites restoration plans, through addressing drought and water-quality impacts across the wider catchment.	Connected	4
FW2 – Rivers (clean)	FW2.1	Discharge agricultural land drains into appropriate interception features in buffers, rather than the stream network.	Better	1
	FW2.2	Establish and manage functional buffer strips and other interception features for all flow pathways to hold runoff and remove pollutants, including chemicals, nutrients and sediment, before it enters rivers and streams.	Bigger	2
	FW2.3	Reduce the input of diffuse phosphate and nitrate pollution into surface and groundwater bodies by using integrated constructed wetlands and	Nature-based	5

Priority habitat	Wider measure reference number	Wider measure	Principle delivering against	Delivery preference
		reedbeds, in addition to hard-engineered treatments.	solutions	
	FW2.5	Reduce the risk of combined sewer overflows by reducing surface water entering the drainage system, for example by using sustainable urban drainage systems, natural flood management measures or similar.	Nature-based solutions	5
FW3 – Rivers (supply)	FW3.1	Safeguard rivers, chalk streams and freshwater habitats in the county that are most sensitive to low water levels through measures to reduce abstraction and water use in the catchment.	Better	1
FW5 – Headwater streams	FW5.1	Safeguard headwater streams from agricultural pollution, erosion and road runoff by using semi-natural buffer strips and interception features.	Better	1
FW6 – ponds	FW6.1	Restore ghost ponds, including dew ponds and dip slope ponds, and hammer and furnace ponds.	Bigger	2
	FW6.2	Enhance lakes to include a mosaic of habitats and watercourses.	Bigger	2
FW8 – Reedbeds	FW8.1	Manage reedbeds to prevent encroachment of woodland, and by managing associated ditches and dykes, conservation grazing, minimal chemical interventions and consider management of saline flooding.	Better	1
FW9 – Freshwater wetlands	FW9.2	Manage, restore and expand river valley wetlands, for example floodplain meadows, floodplain grazing marshes, reedbeds and mudflats.	Bigger	2
	FW9.3	Provide opportunities for spring flooding (e.g. for waders) by creating water storage areas for winter rainfall.	More	3

Priority habitat	Wider measure reference number	Wider measure	Principle delivering against	Delivery preference
	FW9.4	Connect existing wetlands through a mosaic of habitats.	Connected	4