

Priority Catchment Targeting Summary March 2011 – March 2014

River Basin Districts: Humber and North West

Catchment: Semerwater and Upper Lune Total Area: 367 km²

Reasons for designation

The Semerwater catchment contains a SSSI lake that is currently in 'Unfavourable, No Change' condition. Reasons for condition failure relate to the moderately high phosphorus levels within the lake which are both internally derived from lake-bottom sediment and externally derived from tributary water courses. The River Bain and Raydale Beck, which are the outflow and main tributary for the lake, are monitored by the Environment Agency, which has recorded them as rivers in moderate ecological condition due to the moderate levels of diatoms (aquatic organisms).

The River Lune catchment is much larger and contains two priority project areas – Upper Lune and Lower Lune. The Upper Lune management is important to help improve the downstream water quality and bathing water quality at the Lune estuary. Within the upper catchment, tributaries of the River Lune, principally the River Rawthey have been identified by the Environment Agency as being in moderate ecological condition with moderate levels of fish.

Priorities

SSSI condition: To bring Semerwater SSSI Unit 1 into 'Favourable Recovering' condition - Semerwater SSSI Unit 1 (the lake itself) is failing due to phosphorus levels and level of fecal indicator organisms. The water quality is poor for a mesotrophic lake and the site has experienced eutrophication. An impoverished characteristic flora and poor water quality classify the site as unfavourable. Priority will be to reverse the decline in water quality.

Bathing water quality: Morecambe Bay, currently meeting minimum mandatory Directive standards, due to levels of Escherichia coli and intestinal enterococci bacteria.

River water quality status - Rivers Bain, Raydale Beck and Rawthey currently recorded as 'Moderate Ecological status' due to moderate levels of diatoms and fish.

Objectives

Reduce the risk of sediment and soil phosphate loss by encouraging changes to farm management practices using advice delivered through one to one visits on target farms within both catchments and encouraging uptake of resource protection options within Environmental Stewardship.

Reduce risk of nutrient loss to watercourses by advising on changes to farm infrastructure and nutrient management using advice delivered through one to one visits on target farms within both catchments.

Increase farmers' and landowners' understanding of biodiversity, nutrient use, pesticide use, soil husbandry and grassland management through a series of training and demonstration events.

Delivery

Raise awareness of the risks to water quality of incorrect pesticide and sheep dip use by delivering a training program open to all farmers, particularly young farmers, covering the NPTC Level 2 award in the safe use of sheep dip, NPTC Level 2 award in the safe use of pesticides (PA1 & PA6).

Demonstration trial plots will be set up on two farms (one in each catchment), looking at managed nutrient use on grassland, liming effects on grass yield and compaction alleviation in grassland. Events will be held and factsheets produced to inform farmers of results of the trials and its clear links to improving water quality within the catchments.

Reduction in slurry and manure loss will be achieved by delivering specialist farm infrastructure advice to 28 high risk farms within the upper Lune catchment with the aim that the farms will implement the recommendations and apply to the Capital Grant Scheme for grant assistance.

Advice on soil management and nutrient use will be available to the whole catchment. Workshops, farm walks and specialist one-to-one farm visits will be available, addressing soil management practices, compaction, slurry management and dietary nutrients for ruminants.

Agri-environment and Capital Grant Scheme advice will be available to the whole catchment, with priority given to target area farmers. One to one visits are available and there will be twice-monthly grant advice mornings at Hawes Auction Mart.

Targeting Map

