River Esk Action Plan

Three year plan 2015-2017

FUTURE PARTNERSHIP PROJECTS

Priority	Issue	Aim	Measures	Affected Waterbodies	EA Waterbody Status and Reason for failure	Further Action Required	Estimated Cost (£K)	Delivery Mechanism	Potential Partners	2015 (Project Implementation date)	2016 (Project Implementation date)	2017 (Project Implementation date)
HIGH	**Barriers to fish migration**	**Free access to the River Esk and its tributaries for migratory fish**	**Removal of barriers, creation of fish easements, installation of fish passes**	**Catchment scale**	**N/A**	**Varies depending on structure**	**Varies depending on barrier**	**Project**	**Environment Agency, NYCC Highways, NYMNPA, YERT, Land owners**			
HIGH	Barriers to fish migration	Improve fish passage - Butter beck ford	Installation of box culvert or bridge (cost may be prohibitive)	Butter beck	Morphology	Funding obtained (through Heritage Lottery Bid) for survey, design, costings (Winter 2014). Construction in 2016 (subject to final bid success)	£4K feasibility, design drawings, full costings and paperwork for submission to EA National fish pass panel. Approx £TBC for construction	Project (Heritage Lottery Fund - This Exploited Land)	Environment Agency, NYCC Highways, NYMNPA, YERT, Land owners		Y	
HIGH	Barriers to fish migration	Improve fish passage - Glaisdale ford	Installation of box culvert or fish easement downstream	Glaisdale beck	pH, Ammonia	Funding obtained (through Heritage Lottery Bid) for survey, design, costings (Winter 2014). Construction in 2016 (subject to final bid success)	£4K feasibility, design drawings, full costings and paperwork for submission to EA National fish pass panel. Approx £TBC for construction	Project (Heritage Lottery Fund - This Exploited Land)	Environment Agency, NYCC Highways, NYMNPA, YERT, Land owners		Y	
MEDIUM	Barriers to fish migration	Full survey of all key barriers in the Esk catchment	Funding, survey, design drawings and costings	Catchment scale	Morphology, Fish	Funding, survey, design drawings and costings	Six key structures (Egton Bridge Weir, 2 x Weirs on Stonegate Beck, Crag Farm culvert, Castleton Weir and Westerdale Irish Ford). Approx £3K per structure. Total £18K for feasibility study only.	Project	Environment Agency, NYCC Highways, NYMNPA, YERT, Land owners	Y (dependant on funding)	Y (dependant on funding)	Y (dependant on funding)
MEDIUM	Barriers to fish migration	Full survey of remaining barriers in the Esk catchment	Funding, survey, design drawings and costings	Catchment scale	Morphology, Fish	Funding, survey, design drawings and costings	Seven small structures (Leith House Bridge, Hob Hole Ford, Tower Beck Ford, Crunkly Gill Weir, Danby Beck Bridge, Clither Beck Weir and Glaisdale Weir)	Project	Environment Agency, NYCC Highways, NYMNPA, YERT, Land owners	Y (dependant on funding)	Y (dependant on funding)	Y (dependant on funding)
HIGH	**Water Quality (fine sediment and nutrients) - Diffuse water pollution from Agriculture**	**Work with farmers in the catchment to reduce diffuse pollution from Agriculture**	**On-farm capital works,support with grants, support with agri-environment schemes, water friendly farming training and advice, 1:1, events**	**Catchment scale**	**N/A**	**Varies depending on measure**	**Varies depending on measure**	**Project**	**Catchment Sensitive Farming, Natural England, Environment Agency, Yorkshire Water, NYMNPA, YERT, Land owners, Land managers**			
HIGH	Habitat improvement - Key tributary (Murk Esk)	In-channel habitat improvements (fish cover), spawning habitat improvements and address overshading issues	Small scale bank stabilisation, large woody debris, coppicing (overshading), thinning conifer blocks, small scale fencing work and fencing.	Murk Esk including Eller beck and West Beck	Fish, Invertebrates, pH	Review aerial photos, walkover surveys, engagement with landowners, funding and restoration work	Low cost circa £5K per annum	NYMNPA apprentice programme and volunteers	YERT, NYMNPA, Angling clubs, Environment Agency, Land owners, Land managers, Volunteers	Y	Y	
MEDIUM	Habitat improvement - Key tributary (Upper Esk)	In-channel habitat improvements (fish cover), spawning habitat improvements and address overshading issues	Small scale bank stabilisation, large woody debris, coppicing (overshading), thinning conifer blocks, small scale fencing work and fencing.	Upper Esk and tributaries	Morphology (land drainage), Fish, pH, Zinc	Review aerial photos, walkover surveys, engagement with landowners, funding and restoration work	Low cost circa £5K per annum	NYMNPA apprentice programme and volunteers	YERT, NYMNPA, Angling clubs, Environment Agency, Land owners, Land managers, Volunteers		Y	Y
HIGH	Water Quality - Diffuse Water Pollution from Agriculture	Reduce Diffuse Water Pollution from Agriculture - Key Drivers (Freshwater Pearl Mussel)	On-farm capital works i.e. fencing, watering points, tree planting, buffer stips, clean/dirty water separation, farm infra-structure improvements. 1:1 advice, events. Promotion of other grants.	Target areas - Esk and tributaries upstream of Glaisdale	Fish. pH, Zinc, Sediment, Morphology	Farm surveys, costings, funding bid	Project offer time to carry out surveys and complete funding bids. BIFFA BID £300K Deadline September 2014	Project	Catchment Sensitive Farming, Natural England, Environment Agency, Yorkshire Water, NYMNPA, YERT, Land owners, Land managers		Y (dependant on BIFFA funding)	Y (dependant on BIFFA funding)

HIGH	Water Quality - Diffuse Water Pollution from Agriculture	Reduce Diffuse Water Pollution from Agriculture - Key drivers (WFD failing waterbody)	On-farm capital works i.e. fencing, watering points, tree planting, buffer stips, clean/dirty water separation, farm infra-structure improvements. 1:1 advice, events. Promotion of other grants.	Target area - Glaisdale beck (8 farms - Approx £5K per farm). Total cost £40K	pH, Ammonia, Sediment, Phosphate, Morphology	Farm surveys, costings, funding bid	Project offer time to carry out surveys and complete funding bids	Project	Catchment Sensitive Farming, Natural England, Environment Agency, Yorkshire Water, NYMNPA, YERT, Land owners, Land managers	Y (dependant on funding)		
Priority	**Issue**	**Aim**	**Measures**	**Affected Waterbodies**	**EA Waterbody Status and Reason for failure**	**Further Action Required**	**Estimated Cost (£K)**	**Delivery Mechanism**	**Potential Partners**	**2015 (Project Implementation date)**	**2016 (Project Implementation date)**	**2017 (Project Implementation date)**
HIGH	**Non-native invasive plant eradication**	**Eradicate non-native invasive plants from the Esk catchment**	**Walkover surveys to identify distribution of invasive plants and severity of problem, Liasion with landowners and land managers, eradication work**	**Catchment scale**	**NNIS**	**Funding, Surveys (D/S of Sleights, Upper catchment surveys complete), Liaison and eradication work**	**Catchment scale work £6.5K (£2K co-ordination work and £4.5K contractors) per annum (3 year programme = £19.5K)**	**Currently externally funded 2015 (WREN). Future project?**	**Environment Agency, NYMNPA, YERT, Yorkshire Water, Land owners, Land managers**	Y	Y	Y
HIGH	**Water Quality - Yorkshire Water**	**Work with Yorkshire Water to improve water quality in Esk valley**	**Yorkshire Water on CaBA steering group, Partnership working and engagement (meetings) with Yorkshire Water.**	**Catchment scale**	**N/A**	**N/A**	**Low cost, potential big wins**	**Project/ CaBA/ YERT**	**Yorkshire Water, Environment Agency, NYMNPA, YERT**	Y	Y	Y

YERT ON-GOING ACTIVITIES

HIGH	**Fisheries enforcement**	**Enforcement to protect migratory fish stocks**	**On-going liasion with Environment Agency enforcement staff through local intelligence gathering (anglers, keepers, landowners and nets men)**	**Catchment scale**	**N/A**	**Hightened awareness local people, increased resource during fish migration and spawning times**	**Staff time**	**On-going YERT activities**	**Environment Agency, YERT, Angling clubs**	Y	Y	Y
HIGH	**Fisheries monitoring - juvenile salmonid populations**	**Pre and post restoration work monitoring (effectiveness of restoration work). Long term dataset of salmonid population trends**	**Existing Environment Agency monitoring, supplemented by Hull International Fisheries Institute monitoring.**	**Catchment scale**	**N/A**	**Funding, assessment of catchment coverage**	**Costs from HIFI (£5K)**	**On-going YERT activities**	**HIFI, Angling clubs, Environment Agency, NYMNPA, YERT**	Y	Y	Y
HIGH	**Engaging the local community**	**Involve the local community in the Esk work, education, links to economic growth, value the river**	**Community walks/talks, Website, Leaflets, activities with local schools, "Salmon in the classroom", Riverfly Partnership - Anglers Monitoring Initiative, Catchment Based Approach partnership working, Young Angler Initiative, "Adopt a stream", River Esk Volunteer group, corporate/environmental leave days and workshops/training days with Angling Clubs.**	**Catchment scale**	**N/A**	**Importance of building consistent points of contact with local interest groups i.e. anglers and local community.**	**Varies depending on measure and number of events attended/organised (mostly staff time)**	**On-going YERT and NYMNPA activities.**	**All**	Y Website updates (via CaBA hub). Salmon in the classroom (one school per year). Training - Riverfly partnership (one event) and "Adopt a stream" (one event). Young Angler Initiative.	Y (Implementation and support)	Y (Implementation and support)
MEDIUM	**Fisheries monitoring - Catch returns**	**Long term dataset of salmonid population trends**	**Work with local angling clubs and anglers to record rod catches on Esk and Coastal streams**	**Catchment scale**	**N/A**	**Importance of building consistent points of contact with local anglers.**	**Low cost**	**On-going YERT activities**	**YERT and Angling Clubs**	Y	Y	Y
MEDIUM	**Fish stocking - Annual re-stocking programme**	**Increase long-term migratory fish populations. Utilise juvenile habitat which is inaccessible to migratory fish i.e. upstream of weirs**	**Broodstock collection, rearing at Kielder and release of fed fry (Atlantic salmon and Sea Trout)**	**Catchment scale**	**N/A**	**Review stocking strategy in 2015 (post existing agreement with EA and assessment of other planned habitat improvements).**	**Circa £7k per annum**	**Environment and YERT led**	**Environment Agency, YERT**	Y (Review in 2015)		

MEDIUM	**Fisheries monitoring - fish counter**	**Long term dataset of salmonid population trends**	**Determine optimum location and design of a fish counter and resource implications**	**Catchment scale**	**N/A**	**On-going research**	**Unknown**	**ON-going YERT activity and Environment Agency**	**YERT and Environment Agency**		Y	
Priority	**Issue**	**Aim**	**Measures**	**Affected Waterbodies**	**EA Waterbody Status and Reason for failure**	**Further Action Required**	**Estimated Cost (£K)**	**Delivery Mechanism**	**Potential Partners**	**2015 (Project Implementation date)**	**2016 (Project Implementation date)**	**2017 (Project Implementation date)**
MEDIUM	**Promotion of catch and release**	**Increase long-term migratory fish populations**	**Leaflets, website, good practice.**	**Catchment scale**	**N/A**	**On-going promotion and awareness**	**N/A**	**YERT**	**YERT, Environment Agency and Angling Clubs**	Y	Y	Y
MEDIUM	**Water Quality - Septic Tanks**	**Improve water quality in Esk catchment**	**Awareness raising/promotion of best practice**	**Catchment scale**	**N/A**	**Desk study to calculate number and location of properties which are not on the main sewer network. YERT, CSF + Environment Agency - continued promotion with local community.**	**Staff time and low cost leaflet - mail shot**	**YERT, EA and CSF**	**Environment Agency, YERT, Parish Councils and CSF**	Y	Y	Y
MEDIUM	**Maintenance of all fish passes - Removal of debris (Key structure - Ruswarp Weir fish pass and smolt pass)**	**Allow free access for migratory fish**	**Regular programme of maintenance. Esk energy to monitor and liase with EA via hotline. EA to remove any build up of debris at the head of the fish pass and smolt pass. Checks on other weirs by anglers/riparian owners to be reported to EA hotline/YERT**	**Catchment scale**	**N/A**	**On-going promotion and awareness**	**N/A**	**Esk Energy, EA and YERT**	**Esk Energy, EA and YERT**	Y	Y	Y

EXTERNALLY LED PROJECTS

HIGH	**Fisheries monitoring - Acoustic tracking (Ruswarp Hydro)**	**Determine influence of Ruswarp hydro scheme on upstream migratory fish behaviour**	**Acoustic tagging and tracking**	**Catchment scale**	**N/A**	**HIFI, Esk Energy and Environment Agency to continue monitoring work and report through liasion group**	**Circa £47K per annum**	**Externally led**	**Environment Agency, YERT, Esk Energy, HIFI, NYMNPA**	Y	?	
MEDIUM	**Water Quality - Pollutants from road run-off**	**Improve water quality in Esk catchment**	**Improving infrastructure - sediment ponds and silt traps. Engagement with NYCC as part of 3 year plan.**	**Catchment scale**	**N/A**	**NYCC highways to implement**	**Potentially high cost**	**Externally led**	**Environment Agency, NYCC Highways, YERT**	Y	Y	Y
MEDIUM	**Peatland restoration work**	**Improve water quality in Esk catchment**	**Grip and gully blocking, peat stabilisation, re-profiling and re-vegetation**	**Catchment scale**	**N/A**	**Yorkshire Peat Partnership, Yorkshire Water. Engagement through CaBA**	**Potentially high cost**	**Externally led**	**Yorkshire Peat Partnership, Yorkshire Water. Engagement through CaBA**	Y	Y	Y
LOW	**Woodland measures**	**Improve riparian and catchment habitats. Restore plantations on ancient woodland sites.**	**New native woodland creation, removal of conifer blocks, thinning of conifer blocks, buffering along watercourses**	**Catchment scale**	**N/A**	**Forestry Commision and NYMNPA (woodland officer)**	**Unknown**	**Externally led**	**NYMNPA, Forestry Commission**	Y	Y	Y