Summary - Liverpool City Region Local Nature Recovery Strategy Engagement Workshop

Habitat Ambition – what does good look like?

Farmland	
• **Hedgerow field margins: new planted and restoration.** • Network of joined ponds and hedgerows**.** • More in field trees. • Connected land and habitat**.** • Linking up existing and restoration/ creation of new ponds/ wetlands. • Linking pasture in river corridors. • Improve provision for bird roosting. • **Soil management/ conservation** • Soil structure, below ground biodiversity considered as well as above ground. • **Soil fertility / health –** high soil fertility, especially high phosphate, makes it very difficult to sustain wildflowers, ponds. Recognise limitations for habitat creation on fertilised soils. • **Orchards (**increased**)** • **Habitat for climate adaptation i.e. corpse for livestock shading.** • **Resilience to climate change and flooding.** • **Carbon farming** • Carbon or at least carbon neutrality. • 25% of land 'spared' for habitat creation. • **Better use of field margin strategic.** • **Higher plant and insect/invertebrate diversity and abundance, especially on field margins.** • Link into urban spaces, link to community growing. • No factory or intensive farming. • Methane reduction. • **Reduce pesticide** (water pollution run off). • **Paludiculture** • Peatland restoration and agricultural land use. • **Good quality agriculture land (ALC 1 + 2) protected for food production.** • More support for mental health of farmers. **Consideration of stress,** more investment, financial support model, simplify incentive. • Promoting farming who are trying to do something different. • Natural food management. • Riverbank erosion prevented, good boundaries. • **Designated areas for rewilding.** On unproductive land, marginal lands. • Crops for pollinators, bee friendly.	• Integrated food production and habitat/ biodiversity enhancement on the same areas of land. – inter cropping. • Complementary - hay for equestrians, wood pasture, tiered payments, for margin, flower rich grasslands. • Working with the inherent nature of the land. I.e. Growing what suits the land. • Listen to the voice of the smaller farmers. • **Species rich in term of farm animals (rare breeds)** • Mixed species grazing. • **Grazing systems:** targeted, change in livestock type/ species / numbers. • Regenerative agriculture practice. Extra = less • Discussion with farmers to strengthen nature – barn owls, ditches for water vole etc. • **No run-off into water bodies.** • Management of run-off into watercourses. • No neonicatoin • Low input • MOB grazing – need to be strategic and coordinated. • Nature friendly farm owner/managers – who to work with? Tenant 70%, landowner/farmer 30%. • Nature recovery alongside profitable and sustainable farming business. • More funding: farming not currently financial sustainable. • Financial incentives. • Support to adapt. • Language advice link to LNRS. • BNG as an opportunity/ banking. • Elms • **Circular food economy.** About what you grow locally, education about this. Receives good advice on management and economic model. • Farm shop or local supply. • Markets: better system whereby farmers aren't forced to focus on just breaking each year, where they can invest in the longer term and nature recovery. • Training for contractors. Re litter etc. • More public access in right place. • Education on where our food comes from. • **Education and skills.**

- **Agro forestry.**
- **Move towards organic practices.**
- **Use fertiliser in certain part of land to avoid crop resilience.**
- **Introduce predators instead of chemicals.**
- Farming/gaming advocates.

- Targeted habitat improvement on large estates.
- **Access footpath/ public rights of way**
- **Community owned model.** More support protection for tenant farmers.
- Foster cohesion between farmers/public producers/consumers etc.

Grassland and heathland

- Provide space to increase dune heath and connect existing dune heath areas.
- Recognise the benefits of rabbits grazing within dune grassland.
- **Definition of grassland – any unused grass areas, dune grassland, saltmarsh.**
- **Diverse species rich:** 1) encourage species specific to habitat, 2) recording methods, know what there, 3) support the above.
- **Species rich :** wildflower/hay meadows, right species, more quality grasslands.
- Invertebrates' species rich/ monitored.
- **Messy –** urban and wild species. Less cut grass in urban areas
- **Looks natural, not overcultivated.**
- Mowing – more varied regimes, weed suitable machinery collecting and disposing of cutting e.g. compost or biomass digestion.
- No mow summer?
- **Protection and management**
- unspoilt, not over developed.
- Garston coastal reserve – overused for dog walking leading to reduction in starlings.
- Ground nesting bird protection – keep dogs and people from these nesting sites, fencing!
- Balance of public access and nature needed to reduce disturbance.
- **Increased public awareness of benefit of grassland and heathland to nature carbon and people.**
- Sharing resources for heathland management, e.g. if a site is cutting heather providing the brash to another site for seeding.
- **Picking up cuttings reduces fertile ground and increases diversity.**
- Education of park and green space teams on habitat management.
- Invest suitable machinery.
- **Open, green, fresh air, good for nature.**
- **Community involvement/ education so they're cared for spaces.**
- **Protect and retain historic grasslands as a priority over creating new.**
- Categorised to look for particular species e.g. rapid assessment test.
- Pollinator fodder, buzz pollinators.
- Invasives management (rush).
- **Well managed,** but not overly interfered with.
- **Well-funded**
- Inspire people to be less tidy and less hard landscapes.
- Less grouse shooting, hare coursing.
- Increase to rural police budget.
- Pasture on farmland, beneficial to wintering birds, ground nesters in some cases. Functionally linked land.
- Sandstone ridge: restore (scrub and tree management), damp heath (drying out), create stepping stone and extending heathland habitat.
- Education: let things grow, influence visitor experience, signposting/ information post, paths, regular.
- Habitat section in urban parks, especially wildflower grassland (soil fertility)
- Damp heathland – drainage and nutrient pollution need reversing.
- More heathland: less erosion, tall shrub structure, scattered trees, diverse invert assemblage.
- Use infertile soils for grassland and (if acid enough) heathland – keep tree planting to fertile soils.
- Controlled burning in suitable areas to encourage strong new growth.
- Very different habitats.
- Protection from tree planting. Balanced approach to areas, mixed uses.
- **Wet grassland and wet heathland were meant to be wet.**
- **Flood management plan.**
- Intro new species if appropriate.
- **Well connected**
- Signage
- Appropriate access.
- **Ambition to create new.**
- **Education/engagement plan and interpretation.**
- **Controlled dogs place, spaces.**
- Urban design practical uses vs aesthetic (e.g. ??)
- re-inventing the wheel.
- Lower development pressures, changed policy, harder to develop on grassland.

• **Low input (no/low artificial fertiliser use) rotationally grazed.** • Restrict use of chemicals. • **Balanced managed spaces** e.g**.** variety, • Amenity grassland available for recreational use and formal use.	• Invest in orgs that are already in place. Avoid bringing g in new orgs. • Low managed spaces e.g. primrose valley and southern grasslands. Habitat developments. • Well, managed for farming habitat set a side, buffer strips, dedicated pastures.
Marine, intertidal and coastal	
• **Species rich –** reptiles and amphibians (natterjacks, sand lizards), wading birds, inverts, and plants**.** • Managing competing priority species, e.g. red squirrel's vs natterjack toads. • Thriving nationally important species well managed. • **MPZ** • Better linked coastal and inland habitats. • **Transitions gradients (Heterogenous)** • Decreased litter (from coasts or sea) • **Barriers and protection to stop recreational disturbance.** • Zonation e.g. for wintering birds • Waterbird refuges, not disturbed by people! • Separate areas controlled for recreation**.** • **Recreation,** accessible, sympathetic, managing number of people pressure. • Recreational disturbance to mange over use of coast. • Monitoring and responding to disturbance; legal framework, operation seabird. • **Education of public** • Education/social responsibility – **national curriculum** – thread throughout education from age 4 (operation seabird). • **Recording for baseline and monitoring** (sharing of this info with landowners) • Behavioural changes engage with dog owners, get ambassador for nature. • Signage/interpretation and general public info. • **Mersey tidal barrage scheme**: impact on natural population, lessons learned from elsewhere. • **Green energy** - habit • Recognise that with climate change we will need to allow habitat to shift. Landowners remove coastal embankments, issues of public safety/ stablished developed areas. • Financial resource. • **Bin and infrastructure to manage waste.** • Costal protection: footfall, erosion, footpath planning, cliffs and beaches, managed decline. • Better education for the damage dune to the coast with paths etc. • **What good look like depends on place:** seaside, natural.	• Remove land drainage. • Costal Change management, Impact of erosion, nature-based solutions. • Flood protection – erosion. • Value of sand dunes and salt marsh • Eco Tourism • Dynamic – adaptation to natural processes work with nature, especially shoreline. Education re the benefits. • Low pollution – partnerships to work on: water quality (suitable for outdoor swimming) sewage and dogs, solid (plastics etc), High pollution, PFAs. • **Water quality:** blue flags and clean beaches, water safe to swing, WFD, good ecological status. Well managed/appreciated, agri, business/industry. • Sewage free with penalties for polluters i.e. nationalisation. • Ensure infrastructure is not impacting natural processes. • Enforce (CMA in planning) • Connected • Floating habitats • Access to water for recreation (managing impacts). • **Invasive species** • **Well managed.** • **Specific species: wildfowl and wader's baseline** • Reduced/eliminated by catch- responsible fisheries and fishing practice. • Gill net free coast • **Designated sites**: in good quality, protected (that of nation and international importance). • **Specific habitat**: mud flat and sand dune. Improved flood defence, biodiversity, Hoylake • Protected areas of habitat. Reduce loss, coastal squeeze. • Marine reserves legal protection • Salt marsh restoration. • Liverpool city centre: ability to get down to engage with the water. • Seagrass meadows. • Improve docklands for tourism. • Cruise ships/ ferries causing pollution air and water.

• **Reduce plastic:** Plastic in sea, outflows from water treatment.	
Wetlands	
• **Habitat Creation** • Insinuate ponds/ wet grassland in every type of land use, including urban. • More wetlands in new developments/ urban e.g. ponds/ reedbeds. • Scrapes, soakaways, swales being the norm for managing water in parks and greenspaces- temporary wetlands. • **Free from littering** • **more wet farmland: wet grassland, Paludiculture,** raise water levels**.** • Defining wetlands, not necessarily large spaces of land. • **Ponds** • Nature based solution and management. • Effective management • **Managed for increasing biodiversity.** • Looks good**.** • **Species rich, plant and animals** • **Where the land wants to be wet.** • **Species: wading bird species, water voles to move across landscape** • Encouragement of native plant species for all ponds – garden. • **Use of reed bed filtration to improve water quality.** • Mink • A bird sanctuary • **Connected habitats for natterjack toad and GCN.** • **Beavers** • **Biodiversity measurements.** • **Baseline habitat surveys** • **Indicator species – willow tits** • **Native species.** • Monitored • Invasive species • Enhanced and restore dune slacks, dune slack in different stages of succession. • **No peat extraction.** • **Responsible farming/land management** • **Only takes 10 years to create wetland quicker than other habitats.** • **Sustainable urban drainage systems (SUDS), sustainable for flooding but not effective enough to filter chemicals.** • **Peat** • Areas formerly wetlands • Stable coast, water level. • **Avoid building development in river catchment close to streams.** • Biosecurity, dogs, flea medication, shoes/clothing,	• **Safe from development and nearby developments.** • Safe environment, protecting from vandalism. • Land identification not conflicting with agricultural need. • Citizen Science, national records. • Wet woodland • Network of ponds and wetland (especially on clay soils). • Education and understanding. • Public access to nature • Good for health and wellbeing. • High quality accessible blue spaces. • Species disturbance. • Inland waterways and multi-use can be habitat in proxy and other use. • **Re-wiggling rivers**: returning rivers to their natura state. • De-culverting rivers. • **Carbon Sequestration** • Carbon offsetting opportunities. • Peatland and carbon emissions avoidance - restoration • Climate change adaption. • Global warming – rise in levels. • Hydrological monitoring, SLR and Saline inclusion impacts to ground water. • Watercourses, lakes and ponds should have: cleaner water, health ecology, as a natural form as possible, resilience to drought and high rainfall, less INNS. • **unpolluted** • Road run-off pollution • Water quality nutrient pollution • Pollution from sewage, discharge from Irish sea. • When creating or bringing back wetland support appropriate plant/shrub species • Control drainage. • Freshwater marshlands e.g streams, mixed ponds, (bogs, fens and marsh). • Water seeping into coastal boundary and breaking down, exposing tip underneath. • Effect of Mersey barrage on tide, silt, water levels. • Natural Flood management – Slow the flow. • Flood management, moving water to where it is needed (use canals). • Embrace the flood land.
Urban	

- NHS Forest – NHS gardens on hospital sites, volunteering, nature gardening heals.
- Parks and wellbeing.
- **Health and wellbeing**
- Active lifestyl**e**
- Conflict of original design and habitat diversity.
- Balance between public use and allowing nature to thrive.
- Water bodies in parks – habitat diversity and flood prevention.
- **Education and engagement** with nature (especially disconnect and unengaged).
- Initiatives, **activities in parks and greenspaces,** composting schemes.
- Skills workshop for community planting, rewilding
- **Wildflowers** – community spaces, gardens, veg, education**.**
- Native species
- More diversity in planting
- Open mosaic habitat on infertile soils, plant, inverts, tough for public use.
- Long-term management.
- Authorised swimming spots! (not canals)
- More nature-based solutions: **Rain gardens**, **green walls/roof**, planted spaces.
- Alleyways closed and neighbours adopt to grow.
- School – control over contractors.
- **Less formal mowing, more picture frame mowing.**
- **No mow may.**
- Council/ highways only mowing where necessary.
- Canals mow one-side leave other to grow.
- Green the road/ hard surfaces - Less tidy and weed control – increase biodiversity saves money.
- Sustainable transport
- **Flood management** – more canals, 16°C in city/urban, more trees for shade.
- Space for water
- Communities can see and access watercourses.
- Green infrastructure – building with nature (building standards).
- **Urban wildlife habitats – bee brick etc, plant for pollinators.**
- **Bee's- pesticides EU regs, no longer need to follow.**
- Invertebrates and pollinators, can be very rich, can support on small areas.
- Hedgehogs**'** highways, bird boxes, feeders
- **Pride in community engagement, no litter, ownership sharing of ideas**.
- Public will to look after spaces**.**

- Growing for food. Specialise in different crops.
- Growing in education- should be on the national curriculum (GCSE in native)**.**
- Every school should have a plot/ community plot.
- $9m^2$ green space for resident with half managed for healthy habitat.
- **Improve/ better use of green belt.**
- **Encourage small stuff lichen, moss, etc.**
- **Wildlife corridors through urban green.** Roadside verges/ spp rich grassland
- **Greenspace built up area.**
- **Incidental green space/ brown field**
- **Dual purpose greenspace – biodiversity and recreation.**
- More multi-functional open spaces.
- **Good quality blue urban space.**
- **Green and blue infrastructure and corridors**. Physical activity and connectivity.
- Infrastructure that has adaptation and is sustainable for future climates.
- Genuine planning for trees and green space provision in new estates/ proposed builds.
- Stronger enforcement in building regs.
- Building regulation and policy: more wildlife friendly measures, community green spaces lost to development and not replaced, no compensation received (section 106), enforcement of breaches, reporting , transparency and accountability.
- Swift boxes and structures for housing, house sparrows, bats, etc.
- **Focus on re-generation of brownfield sites – despite it being cheaper to build on green fields.**
- **More tree street of native species such as rowan, whitebeam, etc.**
- **Pocket parks/ street trees/** tiny forests
- **On-site BNG**
- Co-ordinated use of BNG funds to ensure most effective.
- Increase funding opportunities for green infrastructure for development and retrofitting.
- Wise use of cost/balance
- **Recreation uses need to be factored in.**
- **Forest school in parks.**
- **Co-production and codesign with communities.**
- **Community spaces:** for interaction/engagement, good growing, art, connecting to nature, taking pride, sustained engagement and maintenance, education/around rewilding, habitat building, build into policies.
- Wetland areas protected from inappropriate development.

• Change perception that there is no wildlife in urban areas not just pests. • Joined up wildlife awareness. • Creative conservation (land li**fe**-style) • Diversity – people feel nature for them. • **Focus food- how do we prepare for the future of food shortage etc.** • Food recycling – make it as easy as possible in urban (with high level**s** of consumption.) • Wildlife friendly construction materials • **Public safety, accessible spaces.** Biodiversity vs safety, nocturnal gardens. • **SUDs (**more**)** • **Join up across community garden spaces.** • **Connection improved "**Making **stepping stories for nature**" but also larger cooperative growing, collectively. • corridors networks (e.g. railway, roads). • A network ownership (self-managed), coordination and networking (foods, skills, funding). • Small, heritage community orchards. • Management **including community** and skills. • **No nighttime lighting**, damaging to night insects.	• **New developments include green space.** • **Local authority has minimum size of garden space.** • **No over development of property.** • **Welcoming/ safety issues: no litter, no ASB, access for all/ enabling. Policed?** • **No astro turf in any garden** (30**°C** natural grass, 60**°C** artificial grass). • **Living roof on public buildings, walls, and bus stops, etc.** • Alternative to hard surfacing/ landscaping • Climate mitigation and cleaner air. Cooler in heatwaves, especially in more deprived area and access to green space. • Urban island heat affect. • **Tree planting** to tackle: air pollution-vulnerable location (school, hospital etc), flood management (drainage, swales), soil expo increased, less concreate. • **Trees:** shade (climate resilience), more tree planting, right tree right place, • Miyawaki forests. • Naturalise what is what is suitable don't force nature.
Woodland – planted and ancient	
• **Diverse Native species**, climate resilient and disease resilience. • Diverse ecology at all level: soil, ground flora, shrub layer, trees, epiphytes • **Deadwood left**. • **Active management – coppicing and thinning** • **Forest schools** • **Education:** business, landowners and farmers. • **Engagement:** community activity, anatomy over decision, café, good car parking (affordable), woodland trails, and engagement from a young age (Gruffalo). • Bats • **Bat boxes and bird boxes**. • Invertebrates • Woods to have all the classic woodland species. • Advocate native species for this area**.** • **Diversity:** age, species (native/nonnative), mixed habitat for species, glades, spaces, ground flora, understory. • **Indicator species present** (Ferns), • Connection of woodland habitats • **Better connected across landscape** • Wildlife corridor	• 15% minimum woodland cover • Increase woodland cover. • Right tree, right place. • Need a strategic approach! On public land or farmland. • Anticipation of climate change premature loss of trees. • Woodland not seen as 'silver bullet' for carbon capture and used within a suite of options. • More **wet woodland** • **Connectivity by more** street trees, woodland, farming field margins, and **hedgerows**. • More tree un urban areas such as city/town centres to protect population n heatwave and encourage wildlife. • **New planting – targeted in underrepresented areas.** • Size, larger woodland, where need from species is connectivity. • Woodland management plans essential. • If woodland is taken for building, then equal amount should be provided of equal quality. • Maintenace for young trees. • **Well managed.** • By design: **– management plans**, ancient/ native, function of woodland,

• Soil management • Good mycelium network • **Coordinated red squirrel conservation and moving reds out of coastal woodlands into inland to ensure sustainability.** • **Invasive species control.** • Deer management maybe an issue. • Joined up approach**.** • Woodland as part of a mosaic of habitats. • **Accessibility**: resilient habitat, proximity/location • Utilising community woodland in existing parks – land management. • **Mersey forest, northern forest.** • Funding • Circular economy • Available for health and wellbeing activities. • Legal protected. • Healthy, diseases managed**.** • **Disease control:** re-stocking of resistant strains, better management of existing woodland prioritise, right tree/right place. • Linking local send/ have provisions**.** • Insect survival • Healthy understory. • UK forestry standard	type of trees/structure/canopy/ national capital, safety, forestry- crop. • Natural management, certain species (e.g. wild boar) • A **management plan with baseline surveys (**removed for financial gain?**).** • Management, what is prime function people or nature conservation? • Balanced: open to public or closed site • Orchards commercial and community. • Long term management of existing woods, many are too dark. • Garden tree undervalued- can make an open woodland. • **Natural regeneration** • **Climate adaptation:** carbon sequestration, shade/cooling, food alleviation, ago-forestry, air quality (uni of Liverpool). • Benefit of managed commercial woodland. • Mapped and recorded, e.g. green infrastructure mapping tool. • Interpretation boards • Welcoming: safe, biophilia, dark spaces, quiet. • Sustainability • Bring diversity to new planted woodland which tend to have few species.

Opportunities and challenges

Farmland	
Opportunity	**Challenge**
• Engage Landowners to value their assets. i.e**.** encourage sustainable land use. • Youth Environmental Service – paid one year employment for 18 – 25-year-olds into nature-based projects – more please. • New techniques/ innovation • Encouraging landown**ers** to adopt appropriate crops that maximise biodiversity potential – i.e. no winter wheat sowing, no sowing of maize new watercourse etc. • New biproducts for local economy • Alternative incomes • Farmers can benefit from biodiversity net gain**.** • Location of agriculture- reducing Co2 FIP stronger/ clearer links between people and farming • Employment and good quality jobs. • Farmer sustainability – economic – relies on adequate capital and revenue funding of habitat creation and management interventions. • **Farmer champions/ cluster case studies.**	• Landowners' pressure in tenant farmers to maximise profit and increase rents. • **Landowners selling land for development. Balance of development on farmland.** • **Public ownership pressure to sell/develop.** • **Land values – ownership. Owner occupied easier than tenanted in some gets absentee landlords "hope value".** • Development "land banking" how know and manage into wider LNRS vision? • Loss of green space. • Farm size and trend towards amalgamation. • Unsustainable contract with supply chain. • **Supply chain dominated by supermarkets**. • **Supply chain** – transport duties. • **Declining meat and dairy consumption**. • Food waste need to promote seasonal eating. • Mental health • **Lack of young people and new entrants**

• **Show casing outcomes can be done in the bottom line, utilising the language**. • **Lots of existing good work and knowledge by farmers (demonstrations and peer to peer)**. • Healthy productive agricultur**e** – ecological land system = novel integration of crop and biodiversity production. • Piggybacking on farmer being stewards of land → public champions. • BNG etc • Apprenticeships • New legalisation • Agri-environmental scheme potential • Attract votes**.** • Produce marketed in sustainable ways**.** • **Local food to local markets. / buy locally, eat seasonally – organic farming** • Connecting food producers and consumers. • Renewable energy generations- challenge and opportunity. • NFM plus water storage – livestock / Pico hydro. • Diversification to include tourism, nature conservation target, to get different income**.** • Nestboxes, bat boxes etc on farms • Hedgerow planting and connectivity. • Subsidies – more profitable to farm in a nature friendly way. Not entirely productivity driven. • Subsidies - ELMS • **Education for both farmers, contractors and public. NPF of county trust LTL.** • **Education on farmland birds – change in practice/awareness.** • **Education on farming practice.** • Declining Meat and dairy consumption, new crops for new diets, to counter changing climate. • **Paludiculture, carbon friendly farming, small holding, allotments**, **and community growing.** • **Gleaning – large scale composting – biogas? (carbon impacts – needs to be localised?)** • Conservation grazing • **Community growing** • Transition to veganism. • Access for disabilities – miles without styles	• Capacity of farmer/farm manager highly constrained**. Need ready, external availability of materials, expertise, and skilled labour.** • Farmers and growers receiving such tiny amount of final cost of product. • Lack of time, especially time to learn about species and habitats. • **Uncertainty about future policy: what if you put your land into 30-year BNG and then big policy changes, puts food production up, political agenda.** • **Opposition – traditional thinking** • **Changing long held traditional beliefs.** • **Resistant farmers** • Profitability/ lack of funding • How to develop/ implement subsidies • Lower/ lost farm subsidies. • Feed, fuel, and fertilise loses. • If not herbicides, what? • Identifying suitable land funding, skills to deliver. • Working the land harder • Removing rainwater without polluting water bodies • Continuing loss of key farmland species – birds and plant, especially indication some of national importance. • Reduction in pollinators. • How to be economically viable. • Policy reflects voter interest. • Poor regulation/ poor planning guidance. • Chemical, pesticides run off issues. • High phosphate and nitrogen from fertilizers, limits habitat creation possibilities. • Farmer buy in • BNG, New funding → choice, structuring, tied in • Funding and schemes not accessible to support/ language. • What pays in the urban fringe? Liveries (hay) extensive pasture. • Public access • **Politics/ Brexit and trade** • Food security • Climate change

Grassland and heathland	
Opportunity	**Challenge**
• Habitat creation • BNG • Finding funding opportunities for management. • Training/ employment. Green skills • Apprenticeships – making use of grassland for temporary flood water storage.	• Investment/ funding (there is some available) • **Trained staff** • Competing demand – property development • **Knowledge to manage.** • Danger of scrubbing up (woodland)

- Environmental act
- Natural health service
- Development.
- Reintroduction of key species were lost.
- Economic → grassland cut for animal deed
- Natural health products from healthlannd. In partnership with local farmers. Etc
- More national parks created
- Demonstration ROI
- Flood prevention → wet grassland → carbon sequestration.
- Urban/green infrastructure more biodiverse
- Better grazing management.
- Reclaim land use → subsider → opportunity to influence all types of landowners → verges/ gardens/ schools fields etc.
- Identify and survey city region grassland and heathland.
- Connect people to landscape through history – relax growing in Sefton for industrial revolution – teaching kids.
- Massive potential for carbon sequestration
- More information sharing/ training for staff to manage land better.
- Rewilding of improved/ semi-improved grassland
- Reforesting – converting grassland – only where appropriate.
- **Using building waste to build diver wildlife.**
- **Ares in the right place with the right waste!**
- **Utilising verges to regenerate – increase connectivity through species rich grasslands.**
- **Changes to farming subsidies to support habitat creation – paying farmers to continue to manage existing high-quality habitats.**
- **Increase biodiversity in small areas/ species rich grass verges.**
- Cyclical management of heathland – **keep on top of scrub/woodland region.**
- **Manage urban grassland for nature and not aesthetics.**
- Rare bree livestock grazing.
- **Restoration and connection or existing heathland.**
- **Grassland corridors through woodland – glade, rides, fire breaks.**
- Creating space inland to allow for loss of dune grassland and heathland as a result of coastal squeeze.
- Honey Income Stream via bees.
- MOB Grazing systems for species rich swards. (biodiversity/increased productivity/ cost saving hay production).
- Helping pollinators

- Non-native species (plant and animal)
- Litter
- More people visiting – damage to habitats.
- Nutrient enrichment from atmosphere and from other sources e.g. dogs
- Making it economically viable for landowners
- **Being able to demonstrate ROI**
- Inappropriate land use. Habitat creation especially if BNG not deliver correctly.
- Increased pressure of local greenspace use.
- Perceptions of grassland management - tidy.
- **Climate change – fire risk**
- Disturbance - People walking (and dogs) on habitat and damaging habitat
- Heathland very fragment habitat.
- Not a common habitat – lack of awareness of what it is and where it is.
- Recreational use: mountain bike, trail bike damaging the heathland- need to provide alternative sites for bikers.
- Having to prove ROA – What is the focus.
- Councils having different structures/management systems.
- Lack of food production – food insecurity.
- **Public perception of wild area and education.**
- **Creation of suitable soil.**
- **Grazing management – number and type – grazing important.**
- Flooding (can be Beneficial).
- **Unsuitable tree planting**
- Wildfire – heathlands
- Nutrient enrichment, e.g. heath- dogs.
- Neglected public areas – use education to enhance perception and understanding.
- **Some grassland vulnerable to development.**
- Impoverished seed sources due to over 90% loss of grassland.
- **Disturbance of ground nesting birds.**
- Need for housing + reduction of grassland.
- **Landowner perception that public purse should subsidize their business.**
- Active management to prevent dominant species.
- Education on management techniques.
- Funding for cut and collect equipment.
- Local seed Banks.
- Increasing tics
- Dependant on land ownership – enhance land in public ownership very possible.
- reduction of mowing regimes of grass verges.
- Public ownership not always simple way forward.

• Education on what good looks like. • Identifying unproductive areas. • Linking habitats with grassland corridors. • Hay collection as a source of income and selling seed bank.	
Marine, intertidal and coastal	
Opportunity	**Challenge**
• Better management and planning required**.** • make most of increased public awareness and care. • Better water quality led to greater recreational use. • Sustainable recreation (challenges[1]). Lots of audiences: fishing, water sports, photographer, and tourist. Leads to better nature connection and then action. Self – policing **Varying levels of access.** • Education: behaviour change, • Varying levels of access. • Reintroduction of key/ rove species. • Opportunities – heritage neolithic site (Formby). • Green energy (wind farms). • Disturbance of nationally important bird roost. • Shipping waste thrown overboard. • Shrink carbon consumption**.** • Seaweed – sustainable food source. • Public education safe and sustainable costal use • Working with schools and youth group to improve education and awareness. • Sea grass meadows, • Salt marsh restoration. • Flood mitigation opportunity. • Carbon sequestration → salt marsh, sea grass • Flood barrier → sand dunes**.** • **Merseyside people like the coast! Emotional** • **Investment/ have ownerships.** • Open water swimming health benefits. • Changing behaviour by encouraging good – introducing to volunteering. • **Opportunity of international/national designations, irreplaceable habitats**, **and species assemblages, to protect important sites. Breeding of red listed species in these areas[2].** • Working with local planner – join up!! Development land. • LNRS provide strategic overview**.** • **Shoreline management plan.** • **Celebrate the biggest sand dune system in the UK – Sefton Coast.** • **Engage wider public on activity/ participation in coast habs**.	• Coastal erosion, especially from poorly located footpaths. • Samly invasion and non-native species problem on dunes etc and bodies • Difficult species with warming climate e.g. jellyfish etc. • Climate change and sea level rise – coastal squeeze. • Hoylake, Southport etc sand very vegetation on accenting shores. • Need a port for import of goods doesn't always look pretty. • **[2]A lot of designated sites are currently threatened.** • Green energy (offshore wind farms). Tidal barrage, peel ports, seeing it as a money-making scheme. • Pollution → industry → public →water companies • [1]litter, disturbance • Balancing recreation use vs damage to marine environmental species. E.g. jet ski, disturbance, dogs, fishing etc • Behaviour • **How do you create more?** • Development – NSIP's, ROP, • Removal of coastal defences • Water quality. • Climate change. • **How do you manage a dynamic landscape?** • Multiple owners • Multiple interests • Lack of protection form marine environments, • Lack of monitoring baseline information on intertidal and marine habitat and species. • How to manage species. • **Participation/ impact/activity that may be damaging/ disturbance.** • Mersey Tidal green energy, impact on nature. • **Impact on intertidal habitat and species, can be a source of conflict.** • Storms frequence and strength. • Tidal surges • **Litter/waster – coast or sea.** • **Uncontrolled public access e.g. 4x4 etc**. • Future increase visits to coast due to climate change.

• Mersey tidal green energy, • MCZ • Focus on species (charismatic) • **Controlled recreational use.** • Nature based solution for FCERM**.** • Improve water quality – sewage storm water overflow/ legislature compliance/ PFA. • Creating salt marshes for grazing animals (Income??). • **Cleaning up our waterways.** • **Education around coastal change and adaptation**	• LJMU "river Mersey had one of the worst levels recorded globally for a river basin of PFAS. • Dredging – impact on environment at navigation. • Educate councils to enforce MCERTS DEFRA regulation. • Lack of funding/ local authority and EA cutbacks. • No policing • **Ships washing tanks offshore.** • Environmental impact of shipping. • **Invasive species – linked to port activity and marine drifts.** • Reenforce SSSI laws

Wetlands	
Opportunity	**Challenge**
• Paludiculture if it can be made economically viable. • Re-naturalise Riverbanks. • Natural health service. • Beaver. • **NBS to water quality and quantity** • Water pollution fine, go towards social investment. • Habitat creation (as at Lunt) reintroduction of key rare species. • Famer creating wetlands for flood management, drinking water for animals and crops**.** • Make sympathetic with environment green roof, stilts. • Natural flood management scrapes, swales, temporary storage. • Opportunity to turn it into an amenity feature- board walks etc. • Signage – education about what it is and what it is doing. • Very important in winter when sites may not look their best. • Stop housing development on flood plain zones**.** • New wetland • Global warming, climate, sea level - Wetland mitigation • Flood prevention**.** • Pollution discharge, forever chemical - ??? awareness, social media. More research into how pollutants getting into system. • Water companies invest into ? structures (rather than profits) • Mersey ??? - Reduce global warming and sea level rise/ carbon footprint. • Litter plastics – people engagement, pride in local area, education, curriculum. Pressure on supermarkets about plastic packaging. • Re-introduction, bottle return scheme**.**	• Global warming, climate change, sea levels • More expensive than farmland • Pollution/ discharge forever chemicals • Invasive non-native species • Mersey barrage • Litter/ plastic. • Loss of internation/ national bird assemblages • Loss of pond • DDL scheme, not following mitigation hierarchy. • Loss of wetland, silting up/poor management • Top load investments, funding long term vision and investment, brave attitude to risk investments. = more quality jobs • Loss of dune slacks. • INNS • **Space to allow rivers to function naturally.** • Funding – capital and maintenance • Health and safety – water born disease. • Public access • Maintenance, **no dredging.** • Education, benefits of wetlands • Very variable water table (especially costal) and saline intrusion. • Making wetland popular!! – but issues of perception, insects (biting), waterborne disease. • Water extraction increasing with drier summers (climate change). • Bird flu and other diseases. • Skills shortages – conservation specialist, funding/ bid specialist, ecologist etc. • Managing wetland at different successional stages. • Legislative drivers and funding options. • Water quality and road runoff, fertiliser and pesticides.

• Understanding monetary value of wetland in the long-term prevention of ill health, flooding, global warming, soil degradation • Career not a job • Accessible blue space • **Valuing volunteers** • Brave attitude to risk/investment – conversations with Influences, co-creation, evidence based locally led. • Top load investment = more quality jobs • **Education** • Awareness raising • Volunteering • Bird watching hides**.** • **Carbon storage** • **Unique species restoration** • **Natural flood defence** • **Restoration of an underrepresented habitat**. • **Ponds** – small manageable, need clusters of ponds. Close to people, link to urban/gardens. • Links to culture and heritage – archaeolog**y**, peat cores/paleoecology. Place names. • **Natural treatment of wastewater, through wetland/ reedbed creation.** • Opportunities to create interconnected wetland areas. • **Community Projects -Artist residencies, poet/ literature.** • Wetland habitat on farms, wet grassland grazing. • Stream out of culverts – connectivity for water voles. • Network of wetlands e.g. buffer corridor on Wirral (poor quality farmland, supporting habitat to SPA). • **Create/restore dune slacks.** • **Increase and improve habitat and connect for natter jack toads and declining insects.** • Where the ground want be wet – easy creation. • Farmland- drainage for agriculture, nutrient pollution, pesticides. • Loss of dune slacks. • **Making wetland popular!!**	• Dog disturbance and veterinary chemical. E.g. effect on newts of nematoid flea treatment.

Urban	
Opportunity	**Challenge**
• Less herbicide use**s** in urban pavement etc to green up city. • Work with local CVS build on existing actions**.** • 15-minute cities • Vertical greenspaces • **Community plots for schools** • Understand/appreciate, respect and protect/conserve gardening/growing veg**.**	• **Funding** (for maintenance not just creation). • **Housing pressures** – i.e. greenfield sites • Right people leading on planting projects. • **Public perception** – of messy spaces and perfection of weeds or pests. • Mental health • Health inequalities and wealth

• **Education of homeowners re garden planning for biodiversity.** • **Social value and impact** • Education (what wildlife can actually line in the city) • Fostering and education council officials, councillors and general public on the needs and risks of environment – air, land, seas, rivers and lakes. • **Green social prescribing – NHS forest-volunteering in hospital sites.** • Bees and schools • **Working with schools on long term plans.** • Community led native initiatives, e.g. tree planting. • Community organising. • **Community engagement with nature.** • Statutory planning requirement for nature restoration/recovery e.g. swift brick/green infrastructure. • Look at examples of nature rich urban areas. What are they doing/making it happen? • **Use of public space/ land-supermarkets (anything "public facing" not just public owned/ NHS premises libraries – for nature restoration.** • **Cover flat rovers – warehouses/ supermarkets etc in solar panel/green roofs.** • Volunteering • **Better public transport and active travel infrastructure.** • **More active travel needed.** • **Road verges and railway edges.** • **Ban astro turf**! • Education of disadvantage of astroturf, community conversion – help theirs do their garden rather than pave/astro**.** • Urban cooling • Carbon sequestration. • Plant flowers or eat[1] / education into growing food/ schools and education programs. • Opportunity to influence policy**.** • **Climate resilience and adaptation. – heat and flood resistance, offsetting and carbon** • Enhance interest in garden bird feeding/ nest boxes etc. Use of swift nest boxes, bat boxes etc. • Encourage swallows e.g**.** Church grounds, school ground, balconies, rooftop gardens. • Encourage small areas, e.g. church grounds, school, balconies, rooftop gardens, urban bee keeping, green roofs and walls, birds**,** and bat boxes. • Urban bee keeping • Green roofs and walls • Hedgehog boxes	• Poverty – (opportunity[1]) • Full curriculum for high schools, environment is low priority versus key stage subject or targets. • Recreational pressures • Loss of garden to paving for cars, plastic grass (astroturf). • Competing objectives for the land – recreation, nature, and housing. • It's the economy stupid. • Planning new housing development with direct access to green space- parking given priority • DEFRA cut Canal River Trust funding. • Protecting tree in Urban environment – roof damage over tree: • Protecting tree in Urban environment-health and safety (more safety at the moment- needs to be more health), • removal of trees in conservation areas happening, TPO need strengthening. • Pesticide use on urban areas e.g. street edges the grass. How to reduce on climate. • Real estate values. • Willingness to compulsorily purchase for green space. • **Linking up green spaces by corridors through the local plan system.** • **Need to know baseline of species.** • **Lack of space.** • Heritage • Allocation of land for other uses • Travel rates. • Responsibility • Car is king policy. • **Land pressures – housing provisions.** • Poor quality of ponds. • Hard surfacing e.g. concreates.

• Green and blue lungs of LCR • Green corridor of canal. Cooling of areas of green lung concept. • Change perception of some urban wildlife – not pest – love nature. • Protecting tree in Urban environment. • Orchards - opportunities for link to farm/farmland, woodland, grassland • **Garden roofs/ green roofs**. • Urban cooling policy. • Individual plots, as community plots bring people together. • Use of net zero as a catalyst for moving away from bedding plants and cut grass in urban parks. • More porous material in gardens to prevent flooding. • Celebrating nature culture people live. • Accessibility • Surface flood water management – SUDS/ wetlands. • **BNG uplift- transforming abandoned spaces. Survey for existing wildlife, management.** • **Reducing ASB – self policing.** • **Health and wellbeing.** • **Trees – street planting.** • **Cooling affects – trees** • **Enhance ecosystem benefits – pollinators, water management SUDS, Species rich grass verges.** • Allow people to apply to have trees planted outside houses – in place of car spaces. • Tolerance of untidy vegetation.	

Woodland – planted and ancient	
Opportunity	**Challenge**
• **Mersey Forest – Community Forest bringing in national funding partnership in place to deliver.** • **Lunt -National Trust/ wildlife trust partnership. Joining up local woodlands.** • **Engage people with existing woodland/ trees. Connection already there. Tourism/cultural and heritage opportunities.** • **Can be incorporated into existing landscapes/ margins.** • Big public will for more trees. • **Highlight/celebrate ancient woodlands.** • **Galvanise communities to cares for local woodlands/ trees.** • Forest Gardens – edibles • Places for people • **Involve people/ schools in practical action and activities.** • Multi use woodland – specific area for recreation to avoid conflict.	• Overcoming binary tree vs farmland type dialogue that can be portrayed by media. • **Very little ancient woodland in Merseyside – identifying the small pockets of woodland important.** • **Funding for management, not just creation – easy to plant but who managed long term.** • Agreed metric for what is good management. • Coordinating separate interest groups into one meaningful action group. E.g. lots of voluntary groups working separately for the same aim. • New woodland, funding existing sites, via Mersey Trust, Northern Forest (Identifying suitable location who take it on local communities?) • Housing development for diversity if new planted woodland especially ground flora. • Maintenace of new trees planted. • Path management - flooding

• Huge and varied ecosystem service benefits of woodland • Engaging landowners- how two pieces land are managed better connectivity. • Forest schools • Reintroduction of key/rare species • Training / employment in forestry. • In some places allow natural vegetation rather than planting trees. • Active management for carbon sequestration • Carbon credit market • Carbon sink • Wildlife corridors, and more hedgerow/linear habitats. • Connectivity of woodland through hedgerow network. • **Learning and wellbeing for forest schools.** • Community engagement and woodland management • **Habitat variety.** • Funding solemen? • BNG market • Wildlife corridors, and more hedgerow/linear habitats. • Red squirrel**s**. • Allowing re-wilding of woodland from scrub, hedgerows, ruderal land. Also**,** vital habitats. • Making natural regeneration acceptable • Education on appropriate management – e.g**.**, thinnin**g** is good. • Storms – makes clearings**.** • Tree provide**s** 2 – 8-degree reduction in temperature during heat waves. That foster sheltered activity (urban trees). • Long-term thinking e.g**.** what species will thrive in 50 -500 years' tim**e**. • Woodland management need active management with coppicing timber – making this partially vegetable. • **Sensible planting, nature planting as part of a habitat mosaic. Not just blanked planting creates much greater biodiversity**.	• Ownership/management • Maintenace, active management to reduce anti-social behaviour. • **Resource/ funding for long term.** • **Resourcing management in existing tree planted areas.** • Short- and long-term management plans • Nutrient impact from dogs, nitrogen from atmosphere etc. • Not residential – not allowed to live there. • Priority given to windfarms. • Trees dug up for green air zone signs. • Roots damage property/canal banks/ housing • **new woodland – right trees/ location etc.** • Prioritising woodland over other habitats – funding pressures. • Inappropriate management, • Disease control • Ethical dilemmas • **Lack of suitable site for creation – Supply of land and labour skills** • Joined up strategy between market and product chain. • Accessible funding- points of contact. • **Eviction of tenant farmer for large scale tree planting.** • INNS • Land for large woodland/ Creation and expansion. • Deer and sheep grazing. • Lack of local seed/saplings. • Balance broadleaved trees and non-native blossom trees. • Increase woodland cover near urban areas when there are pressure for housing. • Tree diseases • Storms- loses trees. • Commercial woodland for wood/timer – pressure to expand. Homogenise plantations (hostage to disease).