

Appendix 4b - 1 Consolidated Outcomes and Associated Activities (Measures)

ID	No. of items consolidated into Outcome	NRN Objectives	Consolidated Outcome	Associated Activities (Measures)	Mapped Conservation Features	Prioritised Outcome?
38	24	Ecosystem Services	Better awareness, understanding and engagement with nature and the countryside through achieving ANGSt targets	<ul style="list-style-type: none"> - A57, More Accessible Natural Greenspace (including along rivers and new woodland, nature trails and country parks) with better access from settlements - A64, More understanding of, and engagement with nature (including green prescribing)for health and wellbeing benefits. - A70, Use signage and visitor centres to help engage people. - A68, Educational programmes in schools about nature and fund training for young people. - A63, Provide more walks and activities linked to nature (e.g. fungi forays, 30 days wild, urban peregrines) - A65, Engage local communities with nature, create opportunities for volunteers funding small projects (e.g. bats in churches project) 		YES
39	9	Ecosystem Services	Improved Green Infrastructure (following NEP's GI Vision and principles)	<ul style="list-style-type: none"> - A5, Follow the Lawton Principles (more, bigger, better, joined up) in LNRS decision making - A11, Require (via policy) well designed GI in new developments which functions for biodiversity and people, such as Suds, urban trees and green roofs, open space, landscape buffers, nature corridors. - A12, Protect and enhance green infrastructure between developed areas - A13, Production of a green infrastructure map to inform decision making - A14, Biodiversity as key part of green infrastructure - A97, Ensure the long term management of newly created habitats 		YES
43	5	Ecosystem Services	Regenerate towns and major urban areas and build biodiversity better into planning	<ul style="list-style-type: none"> - A6, Successfully embed biodiversity net gain into the planning system - A8, Integrate the LNRS into spatial planning policies - A9, Incorporate requirements for biodiversity into all sectors (planning, farming, health etc) - A10, Embed the Lawton Principles (more, bigger, better, joined up) within planning policy - A11, Require (via policy) well designed GI in new developments which functions for biodiversity and people, such as Suds, urban trees and green roofs, open space, landscape buffers, nature corridors. - A12, Protect and enhance green infrastructure between developed areas - A14, Biodiversity as key part of green infrastructure - A19, Create greener transport links (greenways) - A20, Maximise nature spaces in OxCam Arc - A35, More tree retention and planting (promote the urban tree challenge fund) using species which will adapt to climate change and continue to improve air quality - A18, Education for decision makers such as local authorities on the value of nature and how to restore nature, particularly within planning decisions 		YES
81	9	Ecosystem Services	Plant and protect urban trees/woodland, 30% Canopy Cover	<ul style="list-style-type: none"> - A11, Require (via policy) well designed GI in new developments which functions for biodiversity and people, such as Suds, urban trees and green roofs, open space, landscape buffers, nature corridors. - A35, More tree retention and planting (promote the urban tree challenge fund) using species which will adapt to climate change and continue to improve air quality - A41, Plant woodland within urban areas 		YES
84	17	Ecosystem Services	Better physical and mental health and wellbeing resulting from access to Natural Greenspace	<ul style="list-style-type: none"> - A9, Incorporate requirements for biodiversity into all sectors (planning, farming, health etc) - A64, More understanding of, and engagement with nature (including green prescribing)for health and wellbeing benefits. 	YES	YES

88		Ecosystem Services	Farming and other land management gives greater ecosystem services	<ul style="list-style-type: none"> - A102, Recognise link between soil type and habitat and its management - A103, Better support for land management to increased biodiversity, reduced soil erosion and enhanced carbon sequestration (using direct drilling, min-till, cover crops and good crop rotation) - A104, Achieve best practice in farmland management for wildlife - A105, Engage and support land owners to manage their land for nature. Including access to advice and funding and via facilitation groups and farm clusters. - A106, Encourage uptake of environmental stewardship schemes - A107, More leadership by, and collaboration between landowners/farmers/managers, to manage wildlife - A108, More education of public by landowners/farmers/managers to promote the environment - A109, Support for farming in urban fringe - A110, Coordination between the LNRS, ELM and BNG - A111, ELM to recognise whole farm systems - A112, Improve management for wildlife on equine and shooting (game) sites - A54, Buckinghamshire Council to lead by example through best practice land management on agricultural estate 	YES	YES
93		Ecosystem Services	Better flood attenuation through functioning floodplains, and soils	<ul style="list-style-type: none"> - A123, Payments for land set aside to flood - A124, Reconnect rivers with their floodplain - A130, Understand groundwater in Chilterns and gravels of Thames, re suitability for NFM and interaction with infrastructure - A131, Better understanding of flooding (upstream causes) and better flood warning and resilience (especially relating to groundwater) - A103, Better support for land management to increased biodiversity, reduced soil erosion and enhanced carbon sequestration (using direct drilling, min-till, cover crops and good crop rotation) 	YES	YES
94		Ecosystem Services	Clean Water	<ul style="list-style-type: none"> - A60, Stop water pollution through improve wastewater management and drainage infrastructure taking enforcement action (especially on sewerage) - A103, Better support for land management to increased biodiversity, reduced soil erosion and enhanced carbon sequestration (using direct drilling, min-till, cover crops and good crop rotation) - A58, Reduce the use of chemicals and pesticides and ban neonicotinoids - A113, Collaboration with water company initiatives 	YES	YES
95		Ecosystem Services	Clean Air	<ul style="list-style-type: none"> - A42, Plant vegetation and woodland buffers adjacent to roads and urban areas to screen, reduce and pollution and capture carbon 	YES	YES
97		Ecosystem Services	Less air, water, light, noise pollution	<ul style="list-style-type: none"> - A60, Stop water pollution through improve wastewater management and drainage infrastructure taking enforcement action (especially on sewerage) - A103, Better support for land management to increased biodiversity, reduced soil erosion and enhanced carbon sequestration (using direct drilling, min-till, cover crops and good crop rotation) - A58, Reduce the use of chemicals and pesticides and ban neonicotinoids - A42, Plant vegetation and woodland buffers adjacent to roads and urban areas to screen, reduce and pollution and capture carbon - A59, Reduce fly tipping & litter through education, community involvement, enforcement and fines - A61, Limit light pollution - A113, Collaboration with water company initiatives 	YES	YES
103		Ecosystem Services	Mitigate climate change and store carbon with vegetation (especially trees) and soil	<ul style="list-style-type: none"> - A42, Plant vegetation and woodland buffers adjacent to roads and urban areas to screen, reduce and pollution and capture carbon - A103, Better support for land management to increased biodiversity, reduced soil erosion and enhanced carbon sequestration (using direct drilling, min-till, cover crops and good crop rotation) - A30, Ensure that wildlife can move as required to respond to climate change 	YES	YES
104		Ecosystem Services	Control flooding with NFM, catchment base approach	<ul style="list-style-type: none"> - A127, Establish Natural Flood Management Schemes which create new wetland habitats - A130, Understand groundwater in Chilterns and gravels of Thames, re suitability for NFM and interaction with infrastructure - A116, Catchment sensitive farming and land management - A117, Promote a catchment based approach 	YES	YES
105		Ecosystem Services	More ecosystem services through nature based solutions	<ul style="list-style-type: none"> - A4, More information on natural capital value - A35, More tree retention and planting (promote the urban tree challenge fund) using species which will adapt to climate change and continue to improve air quality - A42, Plant vegetation and woodland buffers adjacent to roads and urban areas to screen, reduce and pollution and capture carbon - A127, Establish Natural Flood Management Schemes which create new wetland habitats 	YES	YES
107		Ecosystem Services	Healthy soil organic matter for carbon sequestration, water retention and soil biology	<ul style="list-style-type: none"> - A103, Better support for land management to increased biodiversity, reduced soil erosion and enhanced carbon sequestration (using direct drilling, min-till, cover crops and good crop rotation) 	YES	YES

2	12	Protected Sites	More sites designated for nature conservation	- A49, Restore and create and buffer designated sites - A24, Designate more sites for nature conservation	YES	YES
3	5	Protected Sites	Designated sites are protected by suitable habitat buffers	- A49, Restore and create and buffer designated sites	YES	YES
51	10	Protected Sites	Ancient Woodland (and irreplaceable habitats) protected and in favourable management	- A36, Collect data on woodland condition - A37, Better management of existing woodland (including retention of deadwood) that is planned for the long term and suitably funded. - A74, Landscape scale deer management to aid woodland establishment and management, supported through funding to landowners and venison market - A78, Coordinated squirrel control within woodlands through funding - A84, Manage woodland for owls - A101, Identify barriers to good habitat management - A52, Support LWS owners to manage and protect sites	YES	YES
53	2	Protected Sites	Favourable condition of SSSIs	- A49, Restore and create and buffer designated sites - A53, More promotion and marketing of existing designated areas and species to be found there	YES	YES
85	9	Protected Sites	Reduced pressure on sites of higher nature conservation value due to there being more alternative Accessible Natural Greenspace	- A45, Create Suitable Alternative Natural Greenspace (SANG's) to reduce recreational pressure (including Chiltern Beechwoods and Burnham Beeches SAC)		YES
26	21	Species and Connectivity	Good connectivity of woodland habitats	- A28, Create new hedgerows (with trees) to act as habitat connectivity corridors - A31, Increase of Rewilding creating a connected landscape for wildlife - A44, Create more beech woodland and heathland to buffer and connect Burnham Beeches SAC to other nearby habitats.	YES	YES
28	7	Species and Connectivity	Good connectivity of wetland habitats	- A98, Minerals plan to provide opportunities for wetland creation - A124, Reconnect rivers with their floodplain - A125, Restore wetland areas of the River Thames and Ray - A127, Establish Natural Flood Management Schemes which create new wetland habitats	YES	YES
29	59	Species and Connectivity	Improved habitat connectivity, (including cross border) for ecological resilience	- A3, Ensure the LNRS creates connections into other administrative areas - A27, Better understanding of how nature corridors function - A103, Better support for land management to increased biodiversity, reduced soil erosion and enhanced carbon sequestration (using direct drilling, min-till, cover crops and good crop rotation)	YES	YES
31	6	Species and Connectivity	Better habitat connectivity across farmland	- A104, Achieve best practice in farmland management for wildlife - A105, Engage and support land owners to manage their land for nature. Including access to advice and funding and via facilitation groups and farm clusters. - A106, Encourage uptake of environmental stewardship schemes - A107, More leadership by, and collaboration between landowners/farmers/managers, to manage wildlife - A109, Support for farming in urban fringe - A110, Coordination between the LNRS, ELM and BNG - A111, ELM to recognise whole farm systems	YES	YES
32	5	Species and Connectivity	Connectivity of green spaces	- A11, Require (via policy) well designed GI in new developments which functions for biodiversity and people, such as Suds, urban trees and green roofs, open space, landscape buffers, nature corridors. - A12, Protect and enhance green infrastructure between developed areas - A13, Production of a green infrastructure map to inform decision making - A19, Create greener transport links (greenways) - A56, Better investment and management and monitoring for nature of parks, road verges and other green spaces - A57, More Accessible Natural Greenspace (including along rivers and new woodland, nature trails and country parks) with better access from settlements - A133, Install wildlife bridges/tunnels to improve passage for wildlife and reduce wildlife killed on transport corridors	YES	YES
33	2	Species and Connectivity	Connectivity between priority habitats	- A5, Follow the Lawton Principles (more, bigger, better, joined up) in LNRS decision making - A10, Embed the Lawton Principles (more, bigger, better, joined up) within planning policy	YES	YES
34	3	Species and Connectivity	Dark corridors for nocturnal wildlife	- A61, Limit light pollution		YES
35	3	Species and Connectivity	Rivers reconnected to floodplains	- A124, Reconnect rivers with their floodplain - A125, Restore wetland areas of the River Thames and Ray - A127, Establish Natural Flood Management Schemes which create new wetland habitats	YES	YES

55		Species and Connectivity	Fewer invasive, non-native species causing problems for native wildlife	<ul style="list-style-type: none"> - A71, Forward planning to reduce the impacts of Ash dieback including the planting of replacement species. - A72, Eradicate Oak Processionary Moth - A73, Removal of exotic conifers and replacement with native habitats - A74, Landscape scale deer management to aid woodland establishment and management, supported through funding to landowners and venison market - A75, Removal of invasive wetland species such as floating pennywort - A76, Removal of Rhododendron from woodland via engagement and funding. - A77, Mink control - A78, Coordinated squirrel control within woodlands through funding 		YES
61		Species and Connectivity	Improved connectivity of rivers (fish passage)	<ul style="list-style-type: none"> - A121, Enhance river corridors as nature corridors and remove barriers to fish passage - A118, Connections from escarpment headwaters into River Thames catchment - A27, Better understanding of how nature corridors function 		YES
68		Species and Connectivity	Protection for, and more Black Poplar	<ul style="list-style-type: none"> - A87, Plant more Black Poplar 		YES
70		Species and Connectivity	Rare or notable (priority) wildlife species are protected	<ul style="list-style-type: none"> - A80, A better understanding of the Bechstein's bat population in this region via survey work and plans on how to expand their population - A82, Create a water vole recovery strategy including reintroductions - A83, Management for Otters, including watercourses and Hyde Land Lakes - A84, Manage woodland for owls - A89, Manage land for wetland birds 		YES
71		Species and Connectivity	Favourable condition of invertebrate assemblages	<ul style="list-style-type: none"> - A85, Planting for pollinators 		YES
72		Species and Connectivity	An increase in farmland birds (including objectives for specific species)	<ul style="list-style-type: none"> - A54, Buckinghamshire Council to lead by example through best practice land management on agricultural estate 		YES
78		Species and Connectivity	Recovery of wetland birds	<ul style="list-style-type: none"> - A89, Manage land for wetland birds 		YES
8		Wildlife rich habitat (other)	More Lowland Calcareous Grassland	<ul style="list-style-type: none"> - A100, Better protection for priority habitats - A94, Coordinate management of chalk (calcareous) grassland and encourage livestock grazing - A7, Develop a habitat bank to support biodiversity net gain policy and direct funds to the right sites 	YES	YES
16		Wildlife rich habitat (other)	More ponds	<ul style="list-style-type: none"> - A114, Create new clean water ponds, lakes and reservoirs for wildlife, climate resilience - A7, Develop a habitat bank to support biodiversity net gain policy and direct funds to the right sites 	YES	YES
18		Wildlife rich habitat (other)	Improve WFD ecological status of Rivers and Streams	<ul style="list-style-type: none"> - A115, Link with Thames catchment study with Environment Agency - A116, Catchment sensitive farming and land management - A117, Promote a catchment based approach - A118, Connections from escarpment headwaters into River Thames catchment - A119, Stage 0 restoration on some headwaters - A120, Enhance the condition of the watercourses and reinstate meanders (e.g. River Great Ouse and Ouzel) - A121, Enhance river corridors as nature corridors and remove barriers to fish passage - A129, Better protection (e.g. LWS designation) and awareness of chalk streams, including the removal of barriers and mitigation of harmful infrastructure (Heathrow) - A60, Stop water pollution through improve wastewater management and drainage infrastructure taking enforcement action (especially on sewerage) - A7, Develop a habitat bank to support biodiversity net gain policy and direct funds to the right sites 	YES	YES
22		Wildlife rich habitat (other)	Improved condition of priority habitats	<ul style="list-style-type: none"> - A100, Better protection for priority habitats - A7, Develop a habitat bank to support biodiversity net gain policy and direct funds to the right sites 	YES	YES
41		Wildlife rich habitat (other)	More wildflower verges	<ul style="list-style-type: none"> - A56, Better investment and management and monitoring for nature of parks, road verges and other green spaces - A93, Use road verges to connect grasslands 	YES	YES
44		Wildlife rich habitat (other)	Improve the condition of chalk streams	<ul style="list-style-type: none"> - A128, Stop unsustainable abstraction for chalk aquifers and chalk streams to protect the habitat - A129, Better protection (e.g. LWS designation) and awareness of chalk streams, including the removal of barriers and mitigation of harmful infrastructure (Heathrow) 	YES	YES

45	2	Wildlife rich habitat (other)	More habitat mosaics	- A5, Follow the Lawton Principles (more, bigger, better, joined up) in LNRS decision making	YES	YES
57	1	Wildlife rich habitat (other)	Restoration and Enhancement of the Ray Valley and Bernwood Area	- A125, Restore wetland areas of the River Thames and Ray	YES	YES
58	9	Wildlife rich habitat (other)	More semi-natural habitats	- A5, Follow the Lawton Principles (more, bigger, better, joined up) in LNRS decision making	YES	YES
59	5	Wildlife rich habitat (other)	Better condition of semi-natural habitats	- A5, Follow the Lawton Principles (more, bigger, better, joined up) in LNRS decision making	YES	YES
62	4	Wildlife rich habitat (other)	More biodiversity in recreation green spaces	- A14, Biodiversity as key part of green infrastructure - A55, Manage parks in a more wildlife friendly way, for example reduced mowing and less herbicides.		YES
63	1	Wildlife rich habitat (other)	Farmland rich in wildlife	- A102, Recognise link between soil type and habitat and its management - A103, Better support for land management to increased biodiversity, reduced soil erosion and enhanced carbon sequestration (using direct drilling, min-till, cover crops and good crop rotation) - A104, Achieve best practice in farmland management for wildlife - A105, Engage and support land owners to manage their land for nature. Including access to advice and funding and via facilitation groups and farm clusters. - A106, Encourage uptake of environmental stewardship schemes - A107, More leadership by, and collaboration between landowners/farmers/managers, to manage wildlife - A108, More education of public by landowners/farmers/managers to promote the environment - A109, Support for farming in urban fringe - A110, Coordination between the LNRS, ELM and BNG - A111, ELM to recognise whole farm systems - A112, Improve management for wildlife on equine and shooting (game) sites - A54, Buckinghamshire Council to lead by example through best practice land management on agricultural estate		YES
64	31	Wildlife rich habitat (other)	More overall biodiversity (minimum of doubling nature)	- A5, Follow the Lawton Principles (more, bigger, better, joined up) in LNRS decision making - A104, Achieve best practice in farmland management for wildlife - A14, Biodiversity as key part of green infrastructure - A24, Designate more sites for nature conservation		YES
65	3	Wildlife rich habitat (other)	Better environmental and wildlife records	- A32, More and better integrated data on species and habitats - A33, Undertake research on designed landscapes, parks and gardens - A34, Record, protect and plan for future, veteran and ancient trees - A36, Collect data on woodland condition - A4, More information on natural capital value - A2, Create a monitoring plan for the LNRS - A80, A better understanding of the Bechstein's bat population in this region via survey work and plans on how to expand their population		YES
92	7	Wildlife rich habitat (other)	More wetland wildlife through functioning floodplains	- A126, Habitat restoration projects on watercourses (e.g. flood meadow pastures, wet woodland) and waterside buffers - A124, Reconnect rivers with their floodplain - A81, Reintroduce beavers - A122, Address unsympathetic use of land in floodplain - A123, Payments for land set aside to flood - A125, Restore wetland areas of the River Thames and Ray - A127, Establish Natural Flood Management Schemes which create new wetland habitats	YES	YES

4	30	Woodland	More native woodland	<ul style="list-style-type: none"> - A39, Large scale broadleaf woodland creation projects, but must be careful not at the expense of other habitats - A40, Promote woodland creation grant support and management planning - A41, Plant woodland within urban areas - A42, Plant vegetation and woodland buffers adjacent to roads and urban areas to screen, reduce and pollution and capture carbon - A43, Plant woodland within agricultural land - A44, Create more beech woodland and heathland to buffer and connect Burnham Beeches SAC to other nearby habitats. - A7, Develop a habitat bank to support biodiversity net gain policy and direct funds to the right sites 	YES	YES
20	9	Woodland	More hedgerows in better ecological condition	<ul style="list-style-type: none"> - A29, Better management of hedgerows and plant trees in existing hedges 		YES
23	2	Woodland	Protect all ancient woodland	<ul style="list-style-type: none"> - A7, Develop a habitat bank to support biodiversity net gain policy and direct funds to the right sites - A100, Better protection for priority habitats 	YES	YES
46	21	Woodland	More woodland in favourable management	<ul style="list-style-type: none"> - A36, Collect data on woodland condition - A37, Better management of existing woodland (including retention of deadwood) that is planned for the long term and suitably funded. - A38, Create a market for woodland produce - A74, Landscape scale deer management to aid woodland establishment and management, supported through funding to landowners and venison market - A78, Coordinated squirrel control within woodlands through funding - A84, Manage woodland for owls - A101, Identify barriers to good habitat management - A52, Support LWS owners to manage and protect sites 	YES	YES
47	1	Woodland	More wet woodland	<ul style="list-style-type: none"> - A126, Habitat restoration projects on watercourses (e.g. flood meadow pastures, wet woodland) and waterside buffers 	YES	YES

Appendix 4b - 2 Consolidated Activities (Measures)

ID	No. of items consolidated into Activity	Consolidated Activities (Measures)
A1	2	Receive resource to deliver strategy
A2	2	Create a monitoring plan for the LNRS
A3	9	Ensure the LNRS creates connections into other administrative areas
A4	3	More information on natural capital value
A5	1	Follow the Lawton Principles (more, bigger, better, joined up) in LNRS decision making
A6	21	Successfully embed biodiversity net gain into the planning system
A7	2	Develop a habitat bank to support biodiversity net gain policy and direct funds to the right sites
A8	12	Integrate the LNRS into spatial planning policies
A9	2	Incorporate requirements for biodiversity into all sectors (planning, farming, health etc)
A10	1	Embed the Lawton Principles (more, bigger, better, joined up) within planning policy
A11	28	Require (via policy) well designed GI in new developments which functions for biodiversity and people, such as Suds, urban trees and green roofs, open space, landscape buffers, nature corridors.
A12	4	Protect and enhance green infrastructure between developed areas
A13	1	Production of a green infrastructure map to inform decision making
A14	3	Biodiversity as key part of green infrastructure
A15	15	Reduce development (especially in the AONB and protected areas)
A16	4	Build new developments on brownfield sites (but protect gardens)
A17	1	Prevent development from impacting on watercourses
A18	6	Education for decision makers such as local authorities on the value of nature and how to restore nature, particularly within planning decisions
A19	2	Create greener transport links (greenways)
A20	1	Maximise nature spaces in OxCam Arc
A21	2	Restore the damage caused by HS2
A22	1	Use Biodiversity Opportunity Areas as focus for nature conservation
A23	2	Designate land as Wildbelt (especially around towns)
A24	1	Designate more sites for nature conservation
A25	2	Improve landscape quality
A26	2	Understand, protect and restore historic and designed landscapes
A27	1	Better understanding of how nature corridors function
A28	5	Create new hedgerows (with trees) to act as habitat connectivity corridors
A29	7	Better management of hedgerows and plant trees in existing hedges
A30	1	Ensure that wildlife can move as required to respond to climate change
A31	18	Increase of Rewilding creating a connected landscape for wildlife
A32	9	More and better integrated data on species and habitats
A33	3	Undertake research on designed landscapes, parks and gardens
A34	4	Record, protect and plan for future, veteran and ancient trees
A35	13	More tree retention and planting (promote the urban tree challenge fund) using species which will adapt to climate change and continue to improve air quality
A36	1	Collect data on woodland condition
A37	15	Better management of existing woodland (including retention of deadwood) that is planned for the long term and suitably funded.
A38	3	Create a market for woodland produce
A39	10	Large scale broadleaf woodland creation projects, but must be careful not at the expense of other habitats
A40	6	Promote woodland creation grant support and management planning