

Draft Specification: 4 x Citizen Science local Pilots

The Authority is Natural England. The Authority's priorities are to secure a healthy natural environment; a sustainable, low-carbon economy; a thriving farming sector and a sustainable, healthy and secure food supply. Further information about the Authority can be found at: <https://www.gov.uk/government/organisations/natural-england>

About Natural England

Natural England (NE) is the government's advisor on the natural environment. We provide practical advice, grounded in science, on how best to safeguard England's natural wealth for the benefit of everyone. Our remit is to ensure sustainable stewardship of the land and sea so that people and nature can thrive. It is our responsibility to see that England's rich natural environment can adapt and survive intact for future generations to enjoy.

Project Background

Natural Capital and Ecosystems Assessment

The Natural Capital and Ecosystems Assessment (NCEA) programme will transform and innovate the way our evidence-base is captured, analysed and brought together to ensure science meets the needs of policy / decision makers to embed a natural capital approach, allowing us to leave our environment in a better state than we found it.

The NCEA will provide a holistic, accurate and robust set of evidence and data for DEFRA to make informed policy decisions about the state of our natural capital assets in high profile policy areas and lead to better outcomes for the environment. It will also identify innovative and transformative ways of collecting, analysing and distributing the data.

Better data and evidence are required so that government and society can:

- Understand our natural capital, how and why it is changing.
- Tackle pressures on the environment and the drivers of change.
- Take biodiversity and natural capital into account in decision making.
- Target action where it will be most effective.
- Evaluate policies and interventions to improve their effectiveness.

NCEA Citizen Science

Citizen Science (CS) is one of the cross-cutting tools/approaches for collecting these data, alongside professional survey, and remote earth observation techniques. Citizen Science generated data is already essential to environmental policy, forming the

majority of current biodiversity monitoring in the UK. It complements and augments standard scientific approaches. Critically it has the potential to contribute even more significant amounts of useful data in places and of a richness that cannot be achieved by other means. The approach also provides an important means for members of the public to connect with nature and the environment, further develop and deepen their appreciation and understanding of its importance and benefit to us.

NCEA CS partners are Defra, Natural England, JNCC, Forest Research and the Environment Agency

Vision / Ambition

Defra group would like to help support and further enhance the role and impact of public studies of nature and the environment (environmental citizen science) across England. Whilst there are many good examples of environmental citizen science practice and use, most are highly specialised with a narrow subject or geographic focus. We would like public study to become a more recognised, respected, and practical option for Defra group programmes to collect data and evidence to help us support nature and its recovery.

- a) Survey focus of investment - shift focus of investment more towards enabling and standardising public studies of nature and the environment to enhance their benefit. Expand from surveillance approach to Monitoring – expand from detecting change to help determine the drivers of change – i.e., determine the impact of pressures and success of interventions.
- b) Citizen science is a more feasible and practical environmental survey option for government programmes and projects – citizen science requires a very different approach to that taken when contracting professional surveyors.

On behalf of the Defra Group, Natural England aims to explore how we might help an inclusive community of national and local stakeholders and interested parties across England better coordinate our efforts, standardise approaches, and engage public participation.

Context and rationale

Citizen science provides an important source of environmental evidence informing government policy, programmes, and projects. However, the full value, impact, and potential of citizen science for government, society, communities, and individuals, is limited by several factors:

- Guidance on the form, format and subject of study that enable effective detection, measurement, record making and data.
- Awareness of the opportunities, capacity, and capability of people to participate.

- The extent and coordination of broad, strategic sponsorship, guidance, and support of volunteers.

Government investment in and use of citizen science data has been more opportunistic than proactive. Public sector policy, programme and project use has focussed more on the acquisition and application of existing/historic data (that already collected) than the design and collection of new/future data (survey effort). As a result,

- Citizen science presents a less practical method of data collection than contracted professionals or staff led survey.
- Use of citizen science data is weighted towards surveillance (detecting general change and trends) as opposed to monitoring impacts (pressures and interventions as drivers of change).
- Data mobilisation issues that impede public sector use are not identified or addressed early enough in the pathway from collection to end use.
- Environmental citizen science investment, projects and initiatives remain disparate limiting their collective value, efficiency and overall benefit.

Natural England want to investigate alternative approaches to help the wide community of performers and stakeholders address these issues and limitations at scale across England. We aim to refine and test the premise that investment in a series of foundational roles/functions will help the community further coordinate, standardise, and engage public study of nature and the environment. We want to work with stakeholders to design and test this concept within four regions of England over the next two financial years, 23/24 and 24/25. A combination of learning from past programmes and more recent local and national consultation has informed this approach and our framing of a pilot programme. In four parallel pilots, Natural England would like to resource collaborative and representative partnerships to install staff to further refine, deliver and learn from the following three roles:

1. **Convene** – to convene and explore shared interest, co-operation, co-development, and co-funding with national and local stakeholders.
2. **Coordinate** – to develop, share and advance methods and tools which help members of the public study nature in a mutually beneficial way and which help users build confidence in the integrity and utility of the data they gather.
3. **Engage** – to secure the time, skills and media needed to engage communities, attract, enrol, and nurture members of the public to proficiently study nature and the environment and benefit from doing so.

Three complementary developments will support delivery of these roles:

- a) **Direct Localised Support** – regionally-based and focused capacity to support Citizen Science (promoting roles 1 and 3 and supporting development of 2)

- b) **Community Resource Library** – provision of a central repository for resources that enable and optimise the study of nature and the environment (promoting role 2 and supporting 1 and 3)
- c) **Thematic Survey Frameworks** - drawing together current community understanding and practice in the study of nature and the environment (promoting role 2 and supporting 1 and 3)

Four regional pilots will be procured on a contract basis with the aim of meaningfully testing the overall hypothesis, practical delivery models for Direct Localised Support (a) and support development of the Community Resource Library (b) and Thematic Survey Frameworks (c). It is anticipated that the collaborative partnerships will involve national and local public sector bodies and NGOs.

The pilots will provide a significant evidence base for development of a sustainable co-funded model for future support for Citizen Science across England beyond the current NCEA lifecycle. Whole programme-life evaluation of the pilots as they develop is integral to this and

The project is supported by all partners to the NCEA Citizen Science workstream, and a Strategic Sub-board with representatives from these partners and wider policy and programme interests.

Pilot description

The focus of this work is on enabling and facilitating coordinated, purposeful studies of nature and the environment by members of the public, that benefit participants and usefully inform and help evaluate decisions, actions and interventions. Although access to and use of existing data is important, it is not the focus of this work. Acknowledging this early will help maintain focus and avoid distractions.

The four pilots will be procured under separate contracts with geographical coverage mapping to Natural England regions:

- Northumbria
- West Midlands
- Norfolk & Suffolk
- Wessex

Further detail on boundaries can be found using the Defra Magic mapping and information tool.

Pilots will provide active resource within regions – skills and experience through staffing and other support as appropriate - leveraging local and national stakeholder input and support progress towards achieving the following:

- Testing value of the three roles:

- Convene – activity that brings together local stakeholders to identify shared interests and priorities, and promote co-operation
- Coordinate – promote shared resources, consult locally and enable all to contribute to their development
- Engage – support appropriate engagement on behalf of local stakeholders
- Positive contribution to regionally specific development focus areas, including Landscape Scale Nature recovery Project (LNRP), Local nature Recovery Strategies (LNRS) and other stakeholder identified priorities.
- Support development of Community Resource Library through consultation, testing and feedback.
- Contribution to development of a sustainable model for future Direct Localised Support – engaging community input; assessing successes and limitations; contributing to programme evaluation.

A set-up phase during '23-'24 Q3 and Q4 will focus on establishing local relationships and priorities and building systems and infrastructure. An operating phase will see progress towards the project aims during the year '24/'25. Evaluation activities will be carried out throughout reflecting the different project phases.

Expected activities

The following core activities will be expected of pilot delivery partners(hips)

Delivery

- Convene a Local Advisory Group to contribute to local pilot development
- Identify local stakeholders, including for example, environmental NGOs; local government interests; locally operating ALBs (Natural England Environment Agency, Marine Management Organisation etc.); community bodies; health and wellbeing interests; Local Environmental Record Centres etc.
- Convene a Local Citizen Science Stakeholder Forum enabling representation from identified local stakeholders
- With stakeholder forum, identify local priorities for Citizen Science: e.g., engagement/recruitment/training; project set-up support; specific projects or development areas etc.
- Identify and deliver locally prioritised support actions
- Direct support for specific NCEA identified initiatives e.g., LNRPs and LNRS

Programme development

- Contribute to NE facilitated monthly learning and sharing workshops with other pilot delivery partners(hips)
- Provide input as required to pilot programme evaluation. Independent evaluation is carried out on NE's behalf by ICF. Specific requirements will be detailed prior

to tendering but likely to include information gathering from stakeholders, structured workshops.

- Consultation activities with local stakeholders to support Community Resource Library and Thematic Survey Framework development.

Administrative

- Convene a contract inception meeting with NE programme staff within two weeks of contract confirmation
- Attend and contribute to NE facilitated pilot set-up workshop with other local pilot delivery partners(hips)
- Attend fortnightly progress meetings (online or face-to-face on site) with NE programme staff
- Quarterly and final reporting to a defined (light-touch) format (see final delivery dates below)
- Management of robust process e.g., GDPR
- Responsibility for contract, staffing and day-to-day legal matters

Nature of partnerships

With the importance of geographical range and broad extent of organisational skills and experience we welcome and encourage the formation of creative partnerships/consortia to deliver pilots in each of the target areas. It is anticipated that consortia may include national and local public sector bodies and NGOs.

Demonstratable experience in the following will be valuable:

- Citizen Science delivery in an environmental context
- Environmental recording landscape locally/nationally
- Volunteer management
- Local/regional reach and relevance
- People engagement, especially hard-to-reach or under-represented groups
- Project management

The contract will be held with a named lead partner. Formal agreements between partners are not required at tender or contract signing stage but Memorandum of Agreement-type arrangements between partners will be expected to have been signed within circa. three months of contract signing to ensure partnership stability.

Natural England Support

Local pilots will be established under contracts, primarily to ensure that Natural England, on behalf of NCEA, can ensure the overall programme development needs

are met. Natural England is committed to supporting this development and will ensure the following are available to pilot delivery partners(hips)

- Access to a named officer responsible for the programme for any ongoing queries
- Close liaison and support for pilot development
- Facilitation of a learning and sharing networking between the four pilots
- Access to initial stakeholder research carried out as part of the local pilot model development
- Access to background documentation and reports
- Provision of Community Resource Library materials
- Direct input by arrangement into Local Advisory Group and Local Stakeholder Forum meetings

Indicative Project Timescales

NCEA (NE) activity		Pilot delivery partners(hip)		Pilot activity		Evaluation activity (ICF)	
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Activity	YEAR 2: '24/'25 – subject to budget approval											
	Q1			Q2			Q3			Q4		
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Local pilot operation phase (Pilots)												
Natural England Support												
Evaluation activities												
Fortnightly progress meetings												
Monthly network workshops												
Advisory group operating												
Stakeholder forum operating												
Quarterly report												
Final report												
Community Resource consultation												
Survey Framework consultation												
Support for specific initiatives												

*These activities have a dependency on final budget approval and will be subject to Options clauses

Project Milestones

	Milestone	Date
M1	Contracts signed; initiation meetings held	November 2023
M2	Infrastructure established: staff in place and up to speed; Advisory Group established; Stakeholder	December 2023

	Group established; Partnership MoUs signed and copies to NE; set-up phase development actions underway; period evaluation actions complete; D1 quarterly report accepted	
M3	Set-up phase complete; required development activities complete; period evaluation actions complete; D2 quarterly report accepted	March/April 2024
M4	Operational phase initiated; required development activities complete; period evaluation actions complete; D3 quarterly report accepted	June 2024
M5	Required development activities complete; period evaluation actions complete; D4 quarterly report accepted	September 2024
M6	Required development activities complete; period evaluation actions complete; D5 quarterly report accepted	December 2024
M7	Required development activities complete; period evaluation actions complete; D6 quarterly report accepted	March 2025

Project Deliverables

	Deliverable	Final delivery date (end)
D1	Quarterly report 1	December 2023
D2	Quarterly report 2	March 2024
D3	Quarterly report 3	June 2024
D4	Quarterly report 4	September 2024
D5	Quarterly report 5	December 2024
D6	Final report	March 2025

Reports will follow a defined format reflecting different project phases in the project lifecycle.

Indicative scale

Resourcing should be appropriate for local support need but we anticipate that each pilot will support two FTE and if appropriate some limited seed-corn funding to support locally identified priorities.

Contract Management

Natural England will nominate a Project Officer who will manage the project and serve as the principle point of contact from Natural England. They will be responsible for the day-to-day management of this contract and will coordinate regular meetings to review the work and ensure it meets the projects aims and objectives. As outlined above, meetings will be incorporated into the programme of works to discuss progress and facilitate feedback provision. Meetings will be organised by the successful Tenderer.

The contractor will be expected to appoint a Project Manager who will act as the principle point of contact and will be responsible for the day-to-day management of the project. The contractor will be required to regularly update the Natural England Project Officer on project progress through fortnightly meetings (online or face-to-face) arranged by the contractor, and when there are any significant issues.