Local Action Groups for Managing Invasive Non-Native Species

A research review for Defra

January 2015



Contents

Glossar	γ	i	
Executive summary			
1 1.1 1.2 1.2.1. 1.2.2.	Introduction Context: Invasive Non-Native Species in Great Britain Scope of the review Aims and research themes Methodology	1 1 2 2 3	
2	Overview of the LAGs	5	
3 3.1 3.2 3.2.1. 3.2.2. 3.2.3. 3.3 3.3.1. 3.3.2. 3.3.3. 3.3.4. 3.3.5.	Outcomes Achievement against Defra's objectives Outcomes for INNS Mitigation, control and eradication Prevention, early detection and rapid response Key INNS outcomes in summary Supporting outcomes Awareness raising Training and education Local engagement Data and sharing of best practice Local co-ordination Summary: value added by LAGs	16 17 18 18 25 27 28 28 33 36 37 38 39	
4.1.1.4.1.2.4.2 4.2.1.4.2.2.	Enablers and barriers Enablers Internal External Barriers Internal External	44 45 45 47 48 48 49	
5 5.1 5.2 5.3	Future of the LAGs work on INNS and the wider legacy Future action on INNS by the Defra-funded LAGs Future funding and income Further considerations and risks	51 51 52 55	
6	Discussion and conclusions	57	
7	Annexes	65	

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Local Action Groups for Invasive Non-Native Species | A report for Defra Contents

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Glossary

AONB - Area of Natural Beauty

AVAC – Allen Valley Angling and Conservation

BEACON - Bollin Environmental Action and Conservation

CFINNS – Cumbria Freshwater Invasive Non-Native Species Initiative

Defra – Department for Environment, Food and Rural Affairs

EA - Environment Agency

GBNNSS - Great Britain Non-Native Species Secretariat

GIGL – Greenspace Information for Greater London

INNS – Invasive Non-Native Species

LAG - Local Action Group

LISI - London Invasive Species Initiative

MoD – Ministry of Defence

NBN - National Biodiversity Network

NE - Natural England

NNNSI – Norfolk Non-Native Species Initiative

NNSS – Non-Native Species Secretariat

PPE – Personal Protective Equipment

WFD - Water Framework Directive

ZSL – Zoological Society of London

Executive summary

This report presents the findings of research to assess the outcomes from £1.5 million of grant aid provided by Defra since 2011 to 29 Local Action Groups (LAGs) to tackle aquatic and riparian Invasive Non-Native Species (INNS) in England. The work funded by Defra will contribute to meeting UK obligations under the EU Water Framework Directive.

INNS Local Action Groups are groups set up by volunteers, charities and other partners that have identified problems in their local area. The 29 groups that successfully bid for funding agreed a set of objectives with Defra based on strategic aims set out in the 2008 Invasive Non-Native Species Strategy, namely:

- Prevention
- Early detection, surveillance, monitoring and rapid response
- Mitigation, control and eradication
- Building awareness and understanding

Defra agreed 259 specific objectives with the 29 LAGs. These objectives varied in scope and scale, from running a few training workshops to eradicating a target species from an entire river. A majority (around 4 in 5) of the objectives were concerned with mitigation, control and eradication, which was in part a reflection of the suitability of those actions for small scale voluntary groups to tackle. Fewer objectives (around 1 in 5) were to do with prevention and early detection/rapid response. Awareness raising activity was often identified as an explicit objective with respect to prevention: in practice almost all the LAGs did some kind of awareness raising work (as described further below).

Research approach and method

The research set out to:

- Summarise overall achievements of the LAG funding
- Highlight successes and blockages to progress
- Make recommendations as to what constitutes good LAG performance and what is required to achieve long term sustainability of LAGs

Research questions and an evidence framework were agreed with Defra which reflected the key aims of the GB Strategy as well as the reality of how LAGs operate on the ground (which does not always align neatly with the Strategy headings).

Evidence was gathered through a mainly qualitative approach which involved desk review of funding reports, telephone interviews with all 29 LAGs, and site visits, in-depth interviews and review of ecological data with 10 LAGs agreed by Defra. Selected numerical data and examples were collated where they were available.

Key limitations of the evidence are its self-reported nature; and the diversity of what was reported across the 29 LAGs which made it difficult to arrive at robust aggregate figures for outcomes or impacts. In response, numerical data is used largely for illustrative purposes alongside extensive case study examples to substantiate key points.

Overview of the funded LAGs

Defra funded a diverse set of LAGs, which ranged from very small ones concerned with a specific site or single pond to others that are leading catchment or county-wide partnerships on INNS. The size of grants awarded was equally diverse, with most (18) receiving less than £30,000 while four large ones received over £100,000. The LAGs worked on a wide range of species (34 in total – of which 23 were WFD 'high impact' species) although the most commonly targeted were Himalayan Balsam, Japanese Knotweed and Giant Hogweed (as agreed with Defra).

In addition to the Defra funding, the LAGs mobilised a wide range of other local resources, most notably thousands of volunteers as well as in-kind and direct financial contributions from a range of partners and local organisations, including businesses and local authorities. Based on self-reported data (which is subject to significant caveats¹) 27 of the 29 LAGs recruited new volunteers who contributed 75,000 hours of time up to April 2014. LAGs also secured (very approximately) some £465,000 of additional funding and in-kind contributions of around £350,000. The latter is likely to be a lower estimate. The extent to which individual LAGs were successful in attracting these additional resources varied (see Annexes 3 and 4).

Achievements of the Defra-funded LAGs

At the time of the research in Autumn 2014, LAGs had either met or were on track to meet the majority of the objectives they had agreed with Defra. Of the 259 objectives to be completed by March 2015, only 18 had not been met; this included situations where it was taking longer than expected to clear target species or where engagement had not worked as well as anticipated.

Reflecting the balance of their objectives in favour of mitigation and control, this is where much of the LAGs' achievement is focused. Almost all LAGs undertook some kind of control work².

- LAGs undertook a great deal of survey work: in many areas this created comprehensive mapping that had not been available before which could support the development of more strategic approaches to tackling INNS;
- They achieved successes in eradicating or severely reducing INNS (e.g. by their own assessment by around 60%+) across parts of catchments or specific sites including some that are priority species for Defra and the WFD.
- LAGs have also although to a lesser extent contributed by engaging in strategic catchment or site specific planning for INNS in their area, ensuring that there is an ongoing management and strategy in place (which cuts across Defra strategic objectives in some).
- LAGs have also engaged landowners, galvanised local action and spawned new groups in some cases, and trained volunteers and practitioners, thus contributing to the 'soft infrastructure' available for control of INNS.

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¹ This data is subject to significant caveats and should be seen as providing a ballpark indication rather than a precise and reliable estimate. It is based on data reported by LAGs to Defra on a six-monthly basis which it was not possible to verify comprehensively or to fully resolve suspected inconsistencies.

² Exceptions were two LAGs which had a small amount of start- up funding in the first round and did not secure further grants.

 Somewhere in the region of 2,500 volunteers and others were trained as a result of the Defra funding, mainly in identification (to support surveying) and control methods.³

LAGs noted a number of limitations to achieving successful control or eradication:

- Some species took longer to control than the established guidance suggested (notably Himalyan Balsam);
- Resources can be stretched for those operating on large geographical scales;
- The extent of invasion revealed by new mapping was sometimes greater than expected; and
- In some areas species were reported to be 'out of control' and may need new or alternative methods of control for LAGs to be able to tackle them effectively (e.g. new biological treatments).

The principal contribution made by LAGs to prevention was through awareness raising activity, most notably the national *Be Plant Wise* and *Check, Clean, Dry* campaigns (promoted by 26 LAGs) but also general awareness raising of INNS problems locally (see Table 4). The total audience reach of these activities cannot be estimated reliably but it is most probably in the tens of thousands.

This awareness raising work has also engaged a wide range of audiences, from boaters and anglers, to dog walkers and football fans, who represent both risks to biosecurity but also 'eyes on the ground' for surveillance (see Diagram 3).

A small number of LAGs have also led early detection initiatives, either with specific audiences (e.g. Tees port workers and marine fishers) or area-wide (e.g. LISI's early warning approach in the Greater London area).

Value added by LAGs

While a formal value for money assessment is not feasible using data that is available from LAGs, the research has demonstrated the particular contribution that LAGs have made to tackling INNS and how they have been effective, in ways that may not be possible through other means.

In many of the areas where LAGs were funded activity on INNS was previously sparse or fragmented. LAGs appear to have made an important contribution to co-ordinated action in a number of places by providing a focus and momentum, backed up by a dedicated resource.

A unique value of LAGs is their being genuinely local and independent which delivers a number of benefits over 'top-down' approaches to control and prevention. For example, they can mobilise local resources (volunteers especially but also finance) that otherwise would not be focused on INNS; they can target and tailor awareness raising in locally appropriate ways, and reach audiences that might otherwise be unaware (e.g. hyper-local interest groups); they can build relationships with landowners that will continue beyond single control treatments; and they can contribute to or be the focus for long term planning

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³ This total is taken from self-reported figures which have not been independently verified by the research team.

and the development of 'soft' organisational infrastructures to support a strategic approach to INNS locally.

On the balancing side, a key weakness of LAGs - and risk to the continuation of their work - is the lack of a sustainable income model in almost all of them. A number have taken early steps to develop partnership or social enterprise models but there is no evidence that this will be a rapid route to freeing LAGs from reliance on grant fund income (the future outlook is covered below).

Enablers and barriers

LAGs reported that key enablers had been the capacity in their organisation created by the Defra funding; being able to draw on INNS expertise of members; being able to mobilise local volunteers (either newly recruited or from existing local volunteer groups); and effective networks of relationships with key stakeholders. The latter included local authorities, local record centres, the Environment Agency, local landowners and business supporters (to varying degrees across the LAGs).

In most cases, LAGs found it straightforward to engage landowners although 1 in 3 of the LAGs reported some difficulty. Lack of legal enforcement authority was cited as a barrier and a small number reported resistance from those who thought INNS were not a problem worth tackling.

As is commonly the case in community-based groups, constraints posed by limited resources and time were noted as a key barrier to success, particularly where LAGs had large areas to cover, or challenging physical geography to overcome. As noted above, some LAGs discovered through their work that the extent of INNS, or the scale and length of time needed for control work, were greater than they originally anticipated.

Future of the LAGs work on INNs and the wider legacy

The future of INSS work that was started or expanded as a result of the Defra funding is uncertain, including full time project co-ordinator posts dedicated to INNS in mid-size and larger LAGS.

Like all community-led groups, LAGs survive on a mosaic of funding that combines grants from different sources with whatever locally generated donations or in-kind contributions can be secured. A key difference made by the Defra funding was to enable a single and explicit focus on INNS as opposed to groups having to 'shoehorn' themselves into funding programmes that have a broader remit.

On the basis of what LAGs reported, it seems likely that the situation for many will revert to this previous state: a number are pursuing funding from programmes such as the Big Lottery fund and Heritage Lottery Fund, EU funds, the Environment Agency and others. LAGs reported there is no dedicated source of grant aid for INNS that they can access apart from the Defra funding.

Almost all of the LAGs have some sort of plan to secure future income. A small number have been forward looking and have been developing options as part of their normal work (e.g. Avon Invasive Weeds Forum) but many are at a relatively early stage.

Three different types of approach were evident:

- Continued heavy reliance on grant funding, including a small number of LAGs that are not exploring alternative options
- Support from partners to secure income directly and/or to transfer some of the LAG's current work to partners who are already involved (mainly in large catchment or county-wide initiatives)
- Absorbing INNS work within the 'parent' organisation (e.g. a river or wildlife trust), but on a less intensive basis

A small number of LAGs have opportunistically created income through commercial activities but only one (LISI) is looking towards a social enterprise model as a means of ensuring future sustainability.

Across the LAGs as a whole, it appears there is a risk to the focus and momentum that LAGs have given to the development of co-ordinated approaches in many areas, where a project officer with a single INNS focus has been important in many cases.

Discussion and conclusions

With respect to Defra's strategic objectives for INNS, LAGs have made an important contribution to mitigation, control and eradication, by undertaking a great deal of survey work and achieving successes in eradicating or severely reducing INNS across parts of catchments or specific sites – including some that are priority species for Defra and the WFD.

In many places, another key outcome has been success in joining-up local activity on INNS and the development of 'soft infrastructures' and longer term planning to support continuing work on INNS.

As a whole, the 29 LAGs had a less direct focus on prevention - although they appear to have delivered a substantial amount of awareness raising activity and reached audiences that otherwise would not have been engaged. Part of the legacy of the Defra funding will be 'eyes on the ground' although the scale of this capability, or its influence on behaviours, cannot be quantified. Some of the larger LAGs are also contributing to long-term strategic approaches in their area, including horizon scanning and measures to support early detection.

A possibly unique capability of LAGs is their ability to mobilise local action at low/no cost, which enhances the value of the funding provided. They also use local knowledge to tailor locally relevant approaches and can be a focus or catalyst for the development of coordinated action.

On the balancing side, the 29 LAGs funded by Defra have, on the whole, been more effective at delivering mitigation and control actions than establishing mechanisms for prevention or early detection (though this was determined by their funding agreements to an extent).

LAGs also appear to be perpetually resource-constrained and the smaller groups, while achieving important local successes, can only make a small contribution to larger strategic objectives simply by virtue of their size.

On the basis of this review, key recommendations for Defra focus on the gap left by the end of Defra funding for LAGs and how it will be filled, in the context that most LAGs are a long

way away from achieving sustainable income models and the risk that poses to co-ordinated action on INNS in places where significant progress has been made. Further recommendations are made about funding and monitoring arrangements, for Defra or other funders.

Recommendations for LAGs are about the need to integrate financial and exit planning as part of 'normal business', including on-going consideration of how specific work can be passed on to others or financial contributions secured from partners. Taking a co-ordinated approach that involves a wide range of partners and local networks is flagged as a key contributor to effectiveness. LAGs are also urged to share good practice with each other, noting the many examples cited in this review.

1 Introduction

This report presents the findings of commissioned research to assess the outcomes from funding provided by Defra to 29 Local Action Groups (LAGs) in England to tackle aquatic and riparian Invasive Non-Native Species (INNS).

1.1 Context: Invasive Non-Native Species in Great Britain

The INNS framework and Defra's strategic objectives

It is widely accepted that one of the greatest threats to biodiversity across the world is that posed by invasive non-native species. Following on from commitments and obligations in various international agreements⁴, Britain was an early leader in Europe in introducing policies to address the problem. In 2008 Defra, with the Scottish and Welsh governments, published the Invasive Non-Native Species Framework Strategy for Great Britain. Objectives set out in the Strategy were aligned to the UK meeting its obligations under the EU Water Framework Directive.

The Strategy identifies roles and responsibilities for addressing INNS in Britain together with a strategic approach focusing on four key aspects:

- Prevention
- Early detection, surveillance, monitoring and rapid response
- Mitigation, control and eradication
- Building awareness and understanding

The Strategy also contains commitments to support action on INNS through legislation, encouraging research and fostering knowledge exchange, including internationally. Partnership working across different levels – national, regional and local – is seen as key to implementing the Strategy. A key objective is to improve the co-ordination of INNS work across the country.

A key action from the Strategy was to set up the GB Non-Native Species Secretariat (NNSS)⁵, which maintains a website portal to provide information and tools to all those working on the INNS problem. Information ranges from high-level developments in legislation and science to detailed information for those active on the ground (for example, information for 'citizen scientists' and others on how to identify non-native species). It is also a key resource for early warning about species that are not yet present but pose a realistic threat.

Local Action Groups for Invasive Non-Native Species

In many areas of the country Local Action Groups have been set up by local organisations and volunteers to lead work on INNS in their areas. Many are associated with established ecological or environmental charities, such as river of wildlife trusts, others are linked to leisure interest groups (e.g. anglers) and some are small independent volunteer groups. A

⁴ As set out in the Annexes of the Invasive Non-Native Species Framework Strategy, 2008.

⁵ http://www.nonnativespecies.org/home/index.cfm

key feature of LAGs is their ability to mobilise volunteers and 'citizen scientists' to identify problems locally and contribute to the co-ordination of local action to prevent and control INNS. Like all community groups, LAGs rely heavily on grant funding with added contributions (financial and/or in-kind) from other stakeholders such as local authorities and businesses.

In recognition of the contribution that LAGs could make to meeting objectives in the UK INNS Strategy and the Water Framework Directive, since 2011 Defra has provided £1.5 million in grant aid via the River Catchment Restoration Fund to assist with the support and establishment of Local Action Groups (LAGs) to tackle aquatic and riparian invasive nonnative species in England.

In response to Defra's funding call, local groups identified issues to do with INNS in their local areas then bid for Defra funding, with awards ranging from a few hundred pounds to one instance of hundreds of thousands (as detailed in chapter 2). Each LAG agreed with Defra a number of objectives that were expected to contribute to achieving targets in the INNS Strategy and Water Framework Directive. Defra offered two rounds of funding: some LAGs received funding in only one round, others received money in both rounds.

An over-arching objective of this funding stream was to develop sustainable action by LAGs through working with partners to attract increasing investment from non-government sources. Raising awareness of INNS locally was also an important aspiration, helping to advance the reach of the nationally-led information campaigns, *Be Plant Wise*, and *Check, Clean, Dry*.

1.2 Scope of the review

1.2.1. Aims and research themes

The principal aim of the research was to assess the overall performance of LAGs against agreed objectives: those they agreed with Defra and how that has contributed to Defra's strategic objectives for INNS (including Water Framework Directive). The findings will help Defra to assess, qualitatively, the value of its funding of Local Action Groups and inform its consideration of future directions. Defra specified that the research findings should:

- Summarise overall achievements of the LAG funding
- Highlight successes (including wider conservation benefits) and blockages to progress
- Make recommendations as to what constitutes good LAG performance and what is required to achieve long term sustainability of LAGs

To meet those requirements, the research focused on the effect of LAGs on INNs in the areas they targeted, on local engagement, and factors that had worked as enablers or barriers towards LAGs' achievements.

The research questions and evidence framework agreed with Defra (see 1.2.2 below) were developed from the principal Strategy headings but also recognised that LAGs' work on the ground does not divide neatly according to the Strategy objectives, since many specific

actions are cross-cutting and multi-purpose⁶. The achievements of LAGs are therefore described in this research in terms of:

- Prevention, early detection and rapid response notably actions to prevent the introduction of new species, including awareness raising; and horizon scanning, measures to support early detection and data sharing.
- Mitigation, control and eradication which has been divided into:
 - Control immediate on the ground actions to remove INNS from targeted sites and prevent re-growth, including mapping of local areas to better identify the current extent of species known to be present;
 - Long term management including the development of monitoring, systems, plans and partnerships that will support continuing action on control and preventing local spread. In some places, but not all, this activity also includes strategic actions to support prevention and early detection, as illustrated by examples in the text.

In addition, the research covered a range of 'supporting outcomes' which are reported individually because many are cross-cutting and contribute to more than one of Defra's strategic objectives. These were defined as:

- Awareness raising
- Training and education
- Local engagement
- Sharing data and best practice
- Local co-ordination

Factors that either supported (enablers) or blocked (barriers) the achievement of LAGs' objectives were also explored, taking into consideration whether these were factors under the direct control of LAGs or ones which arose from their wider operating environment.

Finally, the research examined LAGs' views on whether and how the work begun with the Defra funding is likely to be sustained in future, including the prospects for involvement from other organisations.

1.2.2. Methodology

Defra agreed that a mainly qualitative approach to gathering evidence was appropriate, supported by numerical and ecological data where it had been collected by the LAGs. A formal impact evaluation and quantification of value for money was beyond the means of the review because LAGs had not been required to collect the necessary data, although they had provided Defra with rich narrative evidence, and some quantitative data, during the funding period. Instead, the review provides a detailed qualitative account of the achievements of the LAGs to illustrate if and how LAGs delivered value to Defra, together with learning about good practice in tackling INNS through Local Action Groups.

Evidence gathering involved the following steps:

1. Development and agreement with Defra of a research framework and data capture tool (spreadsheet based)

⁶ A visual representation of how LAGs' activities cut across Defra strategic objectives is provided in Diagram 2 at the end of Chapter 2.

- 2. Initial review of Defra summaries of the 29 LAGs' six-monthly funding reports and input of evidence into the data framework
- 3. Telephone interviews (\sim 45 minutes 1 hour) with each of the LAGs to populate fields in the data framework with information
- 4. Initial review of evidence from steps 2 and 3 to develop a short-list of LAGs to be covered in 10 site visits, which was then agreed with Defra
- 5. Half day or longer site visits with the 10 selected LAGs to probe their approaches and outcomes in greater depth (the research team was accompanied on 5 of the site visits by specialist ecological consultants ADAS who conducted a desk review of data provided by the other five LAGs)
- 6. Capture of data and evidence from the site visits in the data framework

Evidence was moderated throughout by researchers in the team discussing and checking data in the central framework. Analysis was conducted by comparing evidence in the framework across all 29 LAGs and discussed at a whole-day research team workshop according to the key themes listed under "scope" above.

Limitations of the evidence

The principal source of evidence in the review comes from the LAGs, both from what they reported to Defra and from the research team's interviews with them. Even though the research team used their interviewing expertise to probe LAGs in depth, the reliance on self-reported accounts needs to be acknowledged as a limitation. A more complete picture would require counter-balancing views and evidence from local and other stakeholders but that was beyond the scope of this review.

Once the research was underway, it became clear in many cases that there was little or no baseline evidence of the situation before the LAGs started their Defra-funded work so that identifying and attributing change was challenging. This applied more so to awareness raising and engagement impacts than to ecological outcomes, but even for those outcomes the data were incomplete. As a result, the research team has had to rely on LAGs' self-assessment of their own impacts, Defra's six-monthly assessments against objectives, and supporting evidence where it is available.

Subject to the limitations above, the review has assembled extensive, robust and reliable qualitative data that has been collated and analysed in a consistent way, according to the agreed research framework. Where the general limitations outlined above are particularly acute they are flagged in the relevant text.

2 Overview of the LAGs

Overview summary

- Significant diversity among LAGs across factors such as age, geographic scope and funding received from Defra;
- Almost all LAGs had previous experience of INNS, drew on staff time from other organisations, made use of external guidance and worked with volunteers;
- LAGs dealt with at least 34 different INNS, but with three in particular Himalayan Balsam, Japanese Knotweed and Giant Hogweed;
- Around 4 in 5 of LAGs objectives were concerned with mitigation, control and eradication, and 1 in 5 with prevention, early detection and rapid response.

This chapter provides an overview of the 29 LAGs that received funding from Defra, either in the first or second round, or both. This overview serves two purposes: to highlight the diversity of the LAGs and the work funded by Defra; and to frame the evidence and analysis in the subsequent chapters.

Organisational characteristics

A very diverse range of LAGs received grant funding from Defra under the River Catchment Restoration Fund between 2011 and March 2015. Five LAGs stated that they were established mainly in response to the Defra funding in 2011, whilst others were long standing, well established groups, in existence since as early as 1980. Likewise, the amount of funding received by the LAGs from Defra ranged from £1,700 to just over £200,000. Most (18) of the LAGs received funding of less than £30,000 while 4 received over £100,000 with the remaining 9 somewhere in between. Table 1 below gives details of some of the basic organisational characteristics of the 29 LAGs. Other characteristics are drawn out in the relevant sections or in the appendices.

Table 1—Organisational characteristics of the		S	
LAG	Year Established	Goographic Scope	Total Defra Funding
LAG	Established	Geographic Scope	£9,356
*Allen Valley Angling and Conservation	2011	East Allen River (~5 miles)	13,330
Aven Investive wood Forum	2008	The 'Old Avon'	£101,576
Avon Invasive weed Forum Bollin Environmental Action and	2008	THE OID AVOIT	£91,200
Conservation	2010	Bollin catchment	151,200
		Colne and Calder	£72,200
Calder & Colne Rivers Trust	2008	catchments	640.070
*Cumbria Freshwater Invasive Non-native Species Initiative	2010	Cumbria	£10,970
Species initiative	2010	Cumbria	£40,323
Cheshire Region Invasive Species Initiative	2010	Cheshire	
*Cornwall College	2010	Cornwall	£118,740
Cornwall Wildlife Trust and the	2010	Commun	£120,480
Environmental Records Centre of Cornwall			
and the Isles of Scilly	2010	Cornwall	520.024
*Dorset Wildlife Trust	2009	Dorset	£28,921
			£17,883
*Eastleigh Biodiversity Partnership	2012	Eastleigh Borough	£10,129
*Essex Biodiversity Project	2004	Roman River (~3 km)	110,129
		UK (Froglife), Single pond	£3,685
Froglife	1980	(project)	C4 700
Lee & Lincombe Residents Association	2008	Lee and Lincombe valley, Borough valley	£1,700
Lee & Elifeonise Residents / 1330 clation	2000	borough vuncy	£203,500
*London invasive Species Initiative	2009	Greater London	64.546
Medway Swale Estuary Partnership	2000	Medway Estuary/Swale Estuary	£4,546
Wedway Swale Estuary Farthership	2000	Tonbridge, Malling,	£34,350
Medway Valley Countryside Partnership	1988	Maidstone catchments	
Natural Enterprise	2012	Isle of Wight	£49,800
reactiful Effect prise	2012	isic or wight	£71,060
*Norfolk non-native Species Initiative	2008	Norfolk	
Nottingham Biodiversity Action Group	1998	Nottinghamshire	£4,640
Peak District and Lowland Derbyshire Non-		g	£25,942
native Species Initiative	2010	Derbyshire	
*Ribble Rivers Trust	2011	Calder catchment	£15,750
South Yorkshire Biodiversity Research Group	2011	Guider Gutoriment	£2,000
and Network	1992	South Yorkshire	
Chaffe adalaine Wildlife Tours	2010	Cannock Chase AONB,	£8,400
Staffordshire Wildlife Trust	2010	Gaton Brook	£4,650
Tale Valley Trust	1992	Tale Valley	
*Tees Rivers Trust	2007	Tees catchment	£97,900
Tees mivers frust	2007	rees cateminent	£5,500
Tyne Catchment Local Action Group	2011	Tyne catchment	
Wey Valley Landscape Partnership	2011	Wey catchment	£7,750
Wildlife Trust for Bedfordshire,		Bourn Brook River &	£24,487
Cambridgeshire & Northamptonshire	2012	tributaries	
Wiltshire Wildlife Trust	2010	Wiltshire	£24,000
WILLSTINE WINGING TRUST	2010	AA II COLLINE	

Note. * denotes the 10 LAGs who took part in an extended interview and site visit by Brook Lyndhurst

Location of the LAGs

The map below shows the locations at which the 29 LAGs funded by Defra are based. A key is given alongside. Please note that this is not necessarily indicative of the location or locations at which LAGs conducted their INNS work.



A = Eastleigh Biodiversity Partnership
B = Natural Enterprise
C = Avon Invasive Weed Forum
D = Cornwall College
E = Cornwall Wildlife Trust
F = Dorset Wildlife Trust
G = Lee & Lincombe Residents Association
H = Tale Valley Trust
I = Wiltshire Wildlife Trust
J = Froglife
K = Norfolk Non-Native Species Initiative
L = Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire
M = London Invasive Species Initiative
N = Nottingham Biodiversity Action Group
O = Peak District and Lowland Derbyshire Non-Native Species Initiative
P = Staffordshire Wildlife Trust
Q = Allen Valley Angling and Conservation
R = Tees Rivers Trust
S = Tyne Catchment Local Action Group
T = Bollin Environmental Action and Conservation
U = Cumbria Freshwater Invasive Non-Native Species Initiative
V = Cheshire Region Invasive Species Initiative
W = Ribble Rivers Trust
X = Essex Biodiversity Partnership
Y = Medway Swale Estuary Partnership
Z = Medway Valley Countryside Partnership
a = Wey Valley Landscape Partnership
b = Calder & Colne Rivers Trust
c = South Yorkshire Biodiversity Research Group and Network

Organisational set-up and resources

Table 2 below gives a sense of the organisational set-up and competencies of the 29 LAGs.

The vast majority of LAGs had access to skills and competencies directly relevant to their work on INNS – i.e. key members of staff or leadership had prior experience of INNS – and were able to draw effectively on staff time from other organisations (as noted above). Similarly almost all of the LAGs made use of external guidance or toolkits – such as GBNNSS information and guidance, and in particular INNS ID cards, an example of which is given below – and best practice in the course of their work.



Most of the LAGs reported being able to draw on staff time from within their 'parent' or 'host' organisation as well as from outside organisations, an important resource given that the Defra funding generally only supported – either wholly or partially – one member of staff. Roughly half of the 29 LAGs were part of a larger organisation, i.e. had a 'parent' organisation (such as Wildlife Trusts and records centres). The other half were either one of two models; a standalone group dealing primarily with INNS (such as Allen Valley Angling and Conservation), or an organisation within which the INNS project was part of a wider remit, but which did not necessarily have a 'parent' organisation (such as Ribble Rivers Trust).

Almost all of the LAGs also worked with volunteers in some capacity – 27 of the 29 LAGs reported that they had recruited new volunteers during the Defra funded period – and in total the LAGs have reported volunteer contributions that amount to somewhere in the region of 75,000 hours up to April 2014. It is crucial to note that these figures are self reported and have not been independently verified by the research team, and that a number of potential inconsistencies within the data have been identified which mean that these totals should be treated as neither robust nor reliable. The self-reported volunteer hours for each LAG are given in full in Annex 2.

Table 2—Organisational set-up and resources					
Capacity and competencies	Yes	No			
Is it part of a larger organisation?	14	15			
Was the LAG able to draw on staff time from other organisations?	27	1			
Did key members/LAG leadership have prior experience or skills of INNS? (pre Defra funding)		1			
Has the LAG made use of external guidance/toolkits & best practice?	28	1			
Has the LAG used Defra funding to purchase tools/equipment/hardware to support its INNS work?		9			
Has the LAG commissioned or worked with specialist contractors to deliver its Defra-funded INNS work?	18	11			

NB. total for row 2 is 28, as one LAG did not confirm in time whether they had been able to draw on staff time from other organisations

Contractors also played an important role in some LAGs, often depending on the species focus of their work programme and therefore the technical requirements of the control activities undertaken. For example, approaches to controlling Himalayan Balsam typically involved physical pulling sessions utilising volunteers whereas activities focused on Giant Hogweed required chemical and/or mechanical actions. Some groups mentioned that they would have benefitted from being able to employ contractors on occasions, but were unable to due to either a lack of funding, or the strict way in which the Defra funding was allocated to specific tasks or objectives.

Additional finance and resources

As well as the Defra funding, the majority of the LAGs were able to secure additional support from other individuals and organisations – be it financial or through other resources. 21 of the 29 LAGs reported that they received either financial or in-kind contributions which went towards the Defra-funded work, which amounted to somewhere in the region of (very approximately) £465,000 and £350,000 respectively, up to April 2014. It is crucial to note that, as with the volunteer hours above, these figures are self reported and have not been independently verified by the research team, and that a number of potential inconsistencies within the data have been identified which mean that these totals should be treated as neither robust nor reliable. It should also be noted that these totals may represent minimum figures, given that financial and in-kind contributions were not recorded in the first two Defra summary reports which formed part of the research. Annex 4 presents in full the self reported figures for financial and in-kind contributions from others for each of the LAGs.

The size and form of this additional support varied significantly across different LAGs, though some common themes emerged. In many cases LAGs were able to work with their host or other local organisations and businesses who would give up their time to volunteer on active

control work; in fewer cases LAGs secured financial assistance for a specific aspect of their Defra-funded project. Some of the better resourced and funded LAGs operating on a bigger scale may have received larger contributions, but there was enough evidence to suggest that even the smallest groups were able to gain extra support by building relationships with local stakeholders, as the case studies below demonstrate

The following three case studies then illustrate the ways in which additional finance and resources were acquired and utilised in different ways, and the way in which partnership working can successfully boost a LAG's capacity and capabilities:

Additional resources case study 1 – Eastleigh Biodiversity Partnership

- As part of their Defra funded project, Eastleigh Biodiversity Partnership put in place a
 Service Level Agreement which meant that volunteers would participate in LAG
 activities led by The Conservation Volunteers (TCV) group, unless organised through a
 stand-alone local community group. This had the advantage of giving the project
 access to a pre-established and well organised volunteer network which had
 experience of leading various volunteer-led works.
- The project also worked with other partners to boost capacity for control work and support the project more broadly, examples included:
- Three corporate volunteering days were held, involving staff from Enterprise Mouchel and Royal Bank of Scotland;
- Other organisations provided staff to speak at the project's stakeholder forum event including the Environment Agency, Wildlife Trust, New Forest District Council, Eastleigh Borough Counci;
- Eastleigh Borough Council staff from other departments, notably Streetscene, also provided support. Streetscene were very responsive and flexible in picking up and disposing of bags of pulled Himalayan Balsam at short notice (within 1 hour of a call) from urban areas;
- community groups Friends of Hocombe Mead, Friends of Monks Brook Meadow, and Netley Green Team – led their own volunteer work. Friends of Hocombe Mead eventually developed into their own self-sustaining group which will continue to do INNS work even if the Eastleigh project does not continue in its full form.

Additional resources case study 2 – Norfolk Non-Native Species Initiative

- NNNSI have enjoyed considerable success in securing external support for aspects of their work. Norwich City Council, Norfolk County Council and Wickes all agreed financial contributions for INNS work carried out on their land, with the latter agreeing to cover 50% of the costs of the work.
- The initiative also collaborates with partners, primarily via the EU, on the Reducing the Impact of Non-Native Species in Europe (RINSE) project, which works across borders to share best practice and adopt strategic approaches to tackle the threats posed by INNS. NNNSI's work on this is supported with funding from the European Regional Development Fund, Natural England and from the EA through the Water Framework Directive. This multi-funding approach was aided by the initiative's host organisation Norfolk County Council having a project group which has assisted with putting together the necessary bids.
- Another key partnership for the NNNSI is working in the same office as the Norfolk Biodiversity Information Service (NBIS); this provides the facility to keep records up to date and work on new initiatives, one of which has been the use of a cloud database to record INNS data and progress across the catchment.

Additional resources case study 3 – Allen Valley Angling and Conservation

- Despite being a small-scale project that received a small amount of funding and did not have a paid co-ordinator, AVAC managed to run volunteer days which involved people from various organisations.
- Staff from the EA and Sage UK, a local software company and former sponsor of the Angling club, as well as volunteers from the local AONB Wildwatch group and Thornley Leazes residential care home all contributed. Such support significantly boosted the capacity of such a small group, with one corporate day for Sage UK staff involving 25 volunteers alone.

Scope of work on INNS

The invasive non-native species that the 29 LAGS were using the Defra funding to address were diverse and varied. In total, 34 different species were mentioned by LAGs during the course of the research, as either key species that they were focusing control activity on, or other species that they were concerned with; 23 of these are considered 'high impact' under the WFD, and therefore priority species for Defra. Of these 34 species however, three stood out as being the most common focus for LAGs: Himalayan Balsam (*Impatiens glandulifera*); Japanese Knotweed (*Fallopia japonica*); and Giant Hogweed (*Heracleum mantegazzianum*). As well as these three, New Zealand Pigmyweed, American Mink and Floating Pennywort were also relatively common species of concern for LAGs. The full spread of species and the focus of the individual LAGs is outlined in Diagram 1 below. It is worth noting here that the species focus of many of the LAGs was framed by Defra and the funding agreement objectives which named specific species

The geographical scope and scale at which LAGs were dealing with INNS was also very diverse, as Table 1 above demonstrates. It ranged from a single pond or a small stretch of a river, to large counties with over 50 individual catchments.

Both the geographic scale (and related size of funding) and the species focus of each LAG shaped the types of activity undertaken and the 'ways of working' they adopted. This relationship is explored further below.

With regards to Defra's strategic objectives for INNS, the funding objectives that each LAG agreed with Defra largely shaped the orientation of their work. A researcher assessment of the agreed objectives for all 29 LAGs shows that objectives focused on the following (note that this spread does necessarily reflect the amount of work that LAGs undertook in relation to each objective, as will be discussed in later sections):

- Around 4 in 5 of LAGs objectives were concerned with mitigation, control and eradication – for example, "Carry out control of Japanese knotweed and Giant Hogweed on the headwaters of the River Calder, Colne water and Pendle water. The extent of these species will be significantly reduced"; and
- Around 1 in 5 objectives were concerned with prevention, or early detection and rapid response – for example, "Raise public awareness of invasive non-native species through talks/workshops, press releases, magazine articles etc. The project officer will promote the 'Be Plant Wise' and 'Check, Clean, Dry' campaigns."

Diagram 2 summarises how the actions that LAGs engaged in – discussed in further detail in Chapter 3 – relate to Defra's strategic objectives. As is clear from this diagram, there were a

number of activities that could be said to contribute to more than one of the strategic objectives, or for which it is hard to determine exactly which of the strategic objectives they contribute to.

'Ways of working'

Two distinct ways of working have developed among the 29 LAGs, in response to the different situations in which they find themselves. Some LAGs have found themselves working at a local level, i.e. operating on smaller geographic scale, with a focus on perhaps a small sub-catchment or specific site. These LAGs are perhaps the ones that most fit the name Local Action Group; they operate at and focus on a small local level, their members (usually individuals) are involved directly with organising and conducting control action, and they are usually a group rather than an organisation or an individual or initiative within a larger organisation. Essentially, these are the LAGs that are on the ground, with their main focus being on undertaking control and some training and awareness raising locally. Examples include:

- Allen Valley Angling and Conservation, a small-scale organisation, which in 2011 combined the local Angling club with conservation work in the Allen Valley. Their INNS work involves control and eradication of Himalayan Balsam on a 7-mile stretch of the River East Allen, and is carried out primarily by club members and other local volunteers. They engage in local awareness raising by giving information leaflets to local residents.
- Essex Biodiversity Project, hosted by the Essex Wildlife Trust consists of approximately 40 individuals and organisations – with the small-scale INNS work being just one of many local projects in which they are involved. The project was concerned with the direct control of Himalayan Balsam on a 15km stretch of the local Roman River; with this work being carried out by staff and local volunteers.

Other LAGs have found themselves - through choice or necessity - working at a more strategic level. Of the 10 LAGs with which site visits were conducted, 6 of these appeared clearly to be working in this way. These are LAGs which are operating on a larger geographic scale with a focus on a single large catchment or a county containing multiple catchments. These LAGs tend to be part of larger organisations, or a project or initiative that sits within a larger organisation; in fact it may not even be accurate to refer to some as groups, as a number are individual INNS project officers sitting within a host organisation. Unlike the LAGs outlined above, these LAGs are less directly involved with control work, or more accurately, their members (where they have 'members' in the traditional sense, they are more likely to be other organisations than individuals) are not the ones 'on the ground'. What these LAGs have focused on - and in the opinion of the research team, very successfully – is coordinating INNS work across their area or catchment. This involves taking a more strategic view and engaging and interacting with existing local groups around INNS, to coordinate their work on INNS with others in the area. In fact, LAGs operating at this more strategic level are essentially coordinating those groups operating at a more local level, supporting them to do their work on the ground and make sure that it fits into a bigger picture across a larger area. It is worth noting however that the research team did not encounter any examples of the LAGs funded by Defra overlapping in this way.

This way of working seems to represent a significant break from what was occurring previously, where groups operating at a local level were working successfully, but in a

fragmented, isolated fashion, with nobody taking responsibility for the 'big picture' across a catchment or within an area or region. In this way the development of this way of working among a number of LAGs represents an important outcome for the funding as a whole. Realistically, it is probably inaccurate to refer to these more strategic level LAGs as LAGs at all; they are often operating above the local level, are focused more strategically and on coordination rather than action per se, and may be represented by one individual within a larger organisation. Examples include:

- Ribble Rivers Trust, whose INNS project was established with the overarching aims of management and awareness raising of INNS within the River Calder catchment in East Lancashire. The project's focus is on the co-ordination of three pre-existing local volunteer groups with a strategic, catchment scale approach implemented to achieve effective systematic survey and monitoring, and 'top-down' control of Himalayan Balsam, Japanese Knotweed and Giant Hogweed. The three local groups are: Pendle Environmental Action Group, Barley group and Friends of Towneley Park, Burnley.
- Tees Rivers Trust, whose project was established with the goal of effective management and awareness raising of INNS across the whole Tees catchment. Through the co-ordination and support of a vast range of pre-existing local interest and volunteer groups, it has sought to introduce a strategic, whole-catchment approach to the survey, monitoring and control of INNS, with a view to leaving a self-sustaining network in place. The project has coordinated a whole range of organisations across the catchment, including angling clubs, river users, Tees Wildlife Trust, conservation organisations and pre-existing volunteer groups.

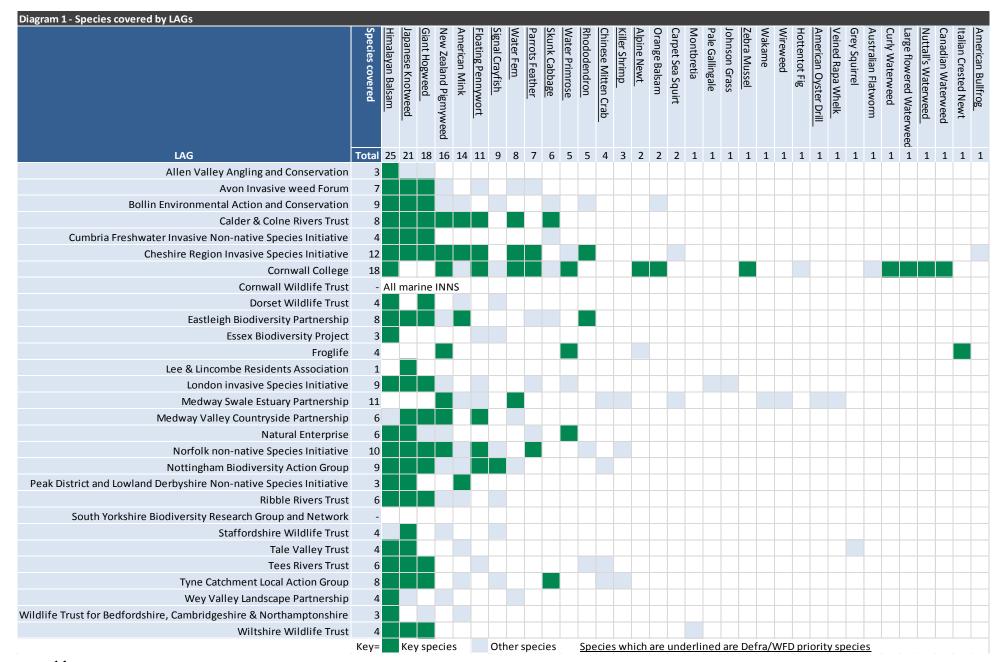
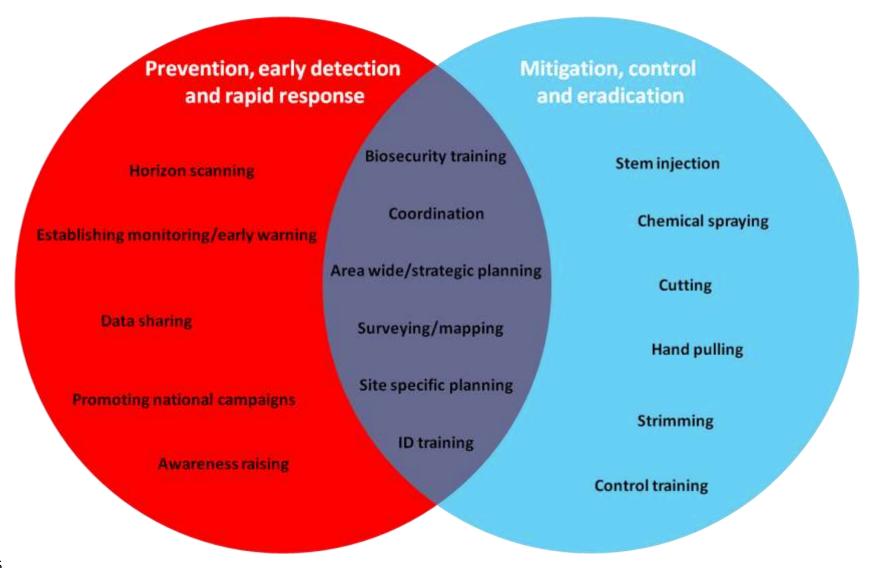


Diagram 2 – LAGs actions and Defra's strategic objectives



3 Outcomes

Outcomes summary

- The 'Baseline' situation is difficult to establish;
- A substantial amount of control and mitigation work was undertaken, with manual control most common;
- Less prevention, early detection and rapid response work was undertaken, and this tended to be informal, but with some good examples of best practice;
- However awareness raising and training activity were extensive and widespread, and reached a large and varied audience, but the impact is difficult to establish.
- Comprehensive surveying and mapping of target areas represents a significant outcome for LAGs, especially as it enables a more strategic approach to control and long term management;
- Eradication or severe reduction of INNS has been achieved at specific sites or across smaller areas, but not on a large scale, partly due to the pressures of time, adverse weather conditions and geographic scale;
- Of the 10 LAGs who took part in site visits, 6 had clearly played an important role in coordinating INNS efforts across their areas;
- Landowner engagement was very successful, but did not mobilise large amounts of resources or funding;

This chapter provides evidence, of a primarily qualitative nature with some supporting quantitative and ecological data, to demonstrate what the LAGs have achieved with the Defra funding. The evidence covers:

- An overview of the extent to which LAGs achieved the individual objectives that were agreed with Defra;
- Outcomes for INNS, organised broadly according to Defra's strategic objectives (as explained in the Introduction):
 - o Prevention, early detection and rapid response
 - Mitigation, control and eradication:
 - immediate control work
 - the development of systems and arrangements to support continuing monitoring and action, some of which is cross-cutting with prevention and early detection
- Other cross-cutting 'supporting outcomes' that have contributed to the direct outcomes on INNS, such as awareness raising, training, data sharing and so on.

It is worth highlighting up front that the baseline situation, both for INNS and for activities under the supporting outcomes, is difficult to establish with any certainty. With regard to INNS this is usually because the extent of the issue in each of the areas that the LAGs have dealt with was not necessarily completely known prior to the Defra funding. Indeed in many cases establishing the extent of the INNS problem by mapping and surveying their areas has been a core element of the LAGs' work. With regard to other activities that contribute to the supporting outcomes, the evidence relies on LAGs' own self-reported assessment of the 'baseline'. This is not to mistrust what LAGs have reported, but simply to acknowledge that the evidence for the baseline situation is limited and not uniform where it exists.

3.1 Achievement against Defra's objectives

Achievement against LAGs objectives

Using Defra's own assessment (from its six-monthly monitoring summary reports), the following table demonstrates the extent to which LAGs have achieved the objectives set out in their funding agreements. In reading this, it is worth bearing in mind that for many of the LAGs, Defra funding does not end until March 2015, and it is therefore perhaps unsurprising that a considerable number of objectives have been classified as 'partially achieved/ongoing.'

Table 3—LAGs achievements against Defra grant funding objectives						
LAG	Achieved	Partially achieved/Ongoing	Not achieved			
Allen Valley Angling and Conservation	1	4	1			
Avon Invasive weed Forum	5	11	3			
Bollin Environmental Action and Conservation	3	10	0			
Calder & Colne Rivers Trust	3	7	0			
Cumbria Freshwater Invasive Non-native Species Initiative	5	0	1			
Cheshire Region Invasive Species Initiative	1	5	1			
Cornwall College	6	9	0			
Cornwall Wildlife Trust	6	12	0			
Dorset Wildlife Trust	6	5	0			
Eastleigh Biodiversity Partnership	4	10	0			
Essex Biodiversity Project	5	1	0			
Froglife	0	0	2			
Lee & Lincombe Residents Association	4	0	1			
London invasive Species Initiative	4	10	0			
Medway Swale Estuary Partnership	6	1	1			
Medway Valley Countryside Partnership	1	10	1			
Natural Enterprise	2	11	3			
Norfolk non-native Species Initiative	6	10	3			
Nottingham Biodiversity Action Group	3	0	0			
Peak District and Lowland Derbyshire Non-native Species Initiative	6	0	1			
Ribble Rivers Trust	1	4	0			
South Yorkshire Biodiversity Research Group and Network	2	0	0			
Staffordshire Wildlife Trust	4	0	0			
Tale Valley Trust	3	1	0			
Tees Rivers Trust	0	12	0			
Tyne Catchment Local Action Group	3	0	0			
Wey Valley Landscape Partnership	4	0	0			
Wildlife Trust for Bedfordshire, Cambridgeshire & Northamptonshire	3	6	0			
Wiltshire Wildlife Trust	5	0	0			
Total	102	139	18			

Nb. This information reflects the most recent Defra summary report for each LAG. This varies, but the most recent available at the time of writing was April 2014. October 2014 reports were received after the exercise was complete.

Bearing in mind that most objectives have been met or are on the way to being achieved, two types of objective are notable among those not met or still in progress. They include eradication of target species in target areas; and under-delivery of, or still to be delivered, awareness raising or training events.

- Engagement activities did not always happen according to plan for a wide variety of reasons. Outcomes for awareness raising are covered in more detail in section 3.2 below.
- With respect to species eradication, many LAGs reported that they needed to tackle
 the problem over several growing seasons so were unable to demonstrate
 confidently eradication in a shorter timescale; and some said they had discovered
 during baseline mapping that the incidence of INNS was greater than they originally
 anticipated.

3.2 Outcomes for INNS

This section focuses on LAGs' direct outcomes for INNS in relation to Defra's three core objectives: prevention; early detection and rapid response; and mitigation, control and eradication. It is followed in section 3.3 by evidence on what have been framed as 'supporting outcomes'. The distinction is somewhat artificial because (as their name implies) the 'supporting outcomes' are often inseparable from what the LAGs achieved on species prevention and control, so this connectedness should be borne in mind when reading evidence about each type of outcome. This is particularly true of the crucial link between prevention and awareness raising.

3.2.1. Mitigation, control and eradication

A significant proportion (approximately 4 in 5) of LAGs' objectives, and therefore their activities, were directed towards control of INNS with the aim of achieving eradication or severe reduction of those species present in LAGs areas. In fact, the interview data showed that almost all of the 29 LAGS undertook control work, or actions directed at control such as purchasing of equipment, during the Defra funded period.

Those LAGs which did not undertake any control work were those which used Defra funding (in round 1) to convene a group and approach interested parties to 'get the ball rolling' on controlling INNS in their area, but failed to secure funding to continue this work: for example South Yorkshire Biodiveristy Research Group and Network, or Peak District and Lowland Derbyshire Non-Native Species Initiative.

As explained in the introduction, this section deals with two related aspects of mitigation work: firstly, immediate or direct control work, and then work to develop systems or arrangements to support continuing monitoring and action on INNS, here termed 'long term management.' As noted earlier, some strategic actions on prevention and/or early detection are also part of long term management actions in some cases.

Immediate or direct control work

Previous activity in the areas where LAGs operated

LAGs generally indicated that there had been some activity in their area prior to the Defra funding by local groups, Local Authorities and other agencies – but in a localised, piecemeal and un-coordinated fashion. Control work was generally being undertaken by groups or

agencies in their specific local area, with limited awareness or concern for what was happening elsewhere in an area or catchment. The flipside of this situation however is that there were a number of interested groups and parties already in existence for LAGs to work with, a key point which will be explored further.

Scope of control activities

One of the first activities that many LAGs engaged in was surveying or mapping of INNS in their target area. Almost all of the LAGs engaged in surveying or mapping activity to some extent, with the amount of such activity generally related to the size of the LAG's target area. Volunteers were quite often involved in this work, as were local groups that the LAG was coordinating.

LAGs engaged in surveying for a number of reasons: to gain a wider understanding of the extent of INNS in their area as prerequisite to control work, or for formulating a strategic, catchment wide approach to control; to monitor the effectiveness of ongoing control work; or to monitor for priority species not yet present, contributing to the prevention of their introduction. Examples of these various kinds of surveying activity are incorporated in case study examples later in the report.

LAGs coordinated or organised a wide range of control actions, including hand pulling, strimming, cutting, chemical spraying and stem injection of INNS. One LAG also organised the release of weevils to control Water Fern, and another ran a trial to test the effectiveness of using hot foam on New Zealand Pigmyweed.

By far the most prevalent were the manual control activities – hand pulling and cutting – reflecting the suitability of these activities for volunteers with little or no training. Since volunteers are a key resource in LAGs the focus on manual activities also favours certain species, notably Himalayan Balsam, for which manual control is at present the most widely used approach. This helps to explain why Himalayan Balsam was the most commonly controlled INNS across the LAGs.

Chemical spraying and stem injection were also quite common activities, although given the need for additional equipment, personal protective equipment (PPE) and training these were used less. Some of the LAGs had foreseen the need to use these kinds of control methods, and had built them into the objectives agreed with Defra; others only established that they would need to use these methods once the funding was underway, and given that the funding was allocated to specific uses, were perhaps less able to use these methods without acquiring other funding.

Control work was undertaken by a range of individuals and organisations, including: LAG members (i.e. individuals, such as members of Allen Valley Angling and Conservation or Lee and Lincombe Residents Association); LAG staff (primarily Project Officers, but also staff within host organisations); volunteers (both new to the LAG and from pre-existing groups such as 'friends of' and conservation groups); contractors; Local Authorities; other statutory/regulatory bodies (such as the Environment Agency, Natural England, National Trust, Wildlife Trusts, Forestry Commission, National Parks); and businesses.

Significant achievements on mapping with benefits to area-wide approaches

The mapping and surveying of INNS undertaken by LAGs in their areas is an obvious achievement, and a prerequisite to any successful campaign of control work, especially at the larger geographic scale at which some of the LAGs were operating. A number of those LAGs operating at a catchment or county scale have managed to survey significant proportions of their areas, while those working at the smaller scales have often achieved almost complete surveying of their target areas. Some key examples that illustrate mapping achievements are:

- Ribble Rivers Trust have succeeded in surveying an estimated 90% of the streams and tributaries in the Calder catchment, using Defra funding of £3,000
- Tees Rivers Trust have managed to map all of the catchment for INNS using Defra funding of £1,000, and maps continue to be updated and refined.

As mentioned above, mapping and survey work has supported both immediate control work (e.g. by providing new data on the current extent of given species) and, in some areas, the start of long-term strategic management approaches.

Many of the LAGs developed databases in which to record their own surveying, accept records from other groups or individuals, and amalgamate existing records held by local record centres. In doing so they have brought together information on the extent of INNS in one place, sometimes using innovative methods such as online or cloud based databases. For example, NNNSI has developed a cloud based database, and LISI has further developed GIGLs online database iGIGL to include INNS). Where it has happened, the creation or development of a central database for a catchment or county is a key output of this funding and a significant achievement because it is often the most extensive and comprehensive mapping of INNS available in the areas where the LAGs are working. At a strategic level, the improvement in data coverage helps to support Defra's aspirations for early detection and prevention, and to assess the impact of strategic control programmes, such as biological controls.

For those LAGs operating on a broad geographical scale, the surveying and mapping undertaken during the Defra funding period appears to have enabled them to have a more comprehensive and catchment wide understanding of the extent of INNS, and they say they are able to focus their control work in a more systematic, targeted and strategic manner as a result.

This outcome likely represents a strong departure from the fragmented, piecemeal approach to control that many LAGs believed was prevalent in their areas before the Defra funding. A number of LAGs – particularly amongst the 10 with which site visits were conducted – appear to be taking this more systematic approach very successfully, for example by targeting control at those species which are not yet widespread throughout the catchment before they become a more significant problem. One example of this comes from LISI and their work on Pale Galingale, Johnson Grass and Water Primrose, all of which were identified to be in limited, specific locations, such as 1km of the Regents Canal, Heathrow, and the London Wetlands Centre respectively. LISI estimates that work to remove Pale Galingale, for example, has reduced the population to about 30% of its original extent.

LAGs are also using their improved knowledge of the extent of INNS to take a 'top-down' approach to control, identifying the uppermost extent of a particular species in given

catchments, beginning control there and working downstream. Whilst this approach may lead to slower, or only site specific successes in the shorter term, there is good reason to believe that it will lead to longer lasting and more sustainable eradication in the long term, because it avoids the issue of groups controlling sites downstream that are being reseeded from further upstream.

Finally, having a catchment wide understanding of the extent of INNS is allowing some LAGs to act as coordinators in their areas, working with existing groups and coordinating targeted and strategic control activity as highlighted in Chapter 2. Local co-ordination is also examined in 3.3 Supporting outcomes, and a case study is given there. It is worth noting that in the opinion of the research team this approach represents a significant outcome and example of best practice.

Impacts on INNS: control and eradication

A number of LAGs expressed concern during the course of the research about using the word 'eradicated,' given the longevity of some of the seed banks for some INNS, the relatively short timescale of the Defra funding, and the uncertainty over whether something has been eradicated until the next growing season reveals any grow back.

The combined evidence sources nonetheless indicate that here have been some definite and clearly verifiable successes where INNS have been eradicated or severely reduced in certain areas. Across the Defra-funded LAGs as a whole, it appears that most have had partial success in severely reducing INNS from their target areas, with some having achieved instances of eradication. These successes have tended to come at the smaller scale, i.e. at individual sites rather than across large catchments, although this is not to say that some of the LAGs are not some way along the path to achieving larger scale eradication.

With that in mind, a number of key examples of success with regards to eradicating or severely reducing INNS have been⁷:

- Norfolk Non-Native Species Initiative (NNNSI) has successfully eradicated Floating Pennywort from the River Waveney. This work involved both volunteers and contractors spraying and pulling Floating Pennywort in the river, and continual monitoring of sites to ensure the success of control work and monitor any grow back. In November 2013 the contractor's report stated that no Floating Pennywort had been found along the length of river which had been controlled. Further monitoring by NNNSI suggests that this continues to be the case, but monitoring continues to ensure that any new growth can be targeted quickly.
- Dorset Wildlife Trust have successfully controlled Himalayan Balsam at Matchhills Coppice. In 2009 surveys revealed that Himalayan Balsam was 'Dominant' at the site on the accepted DAFOR scale (Dominant, Abundant, Frequent, Occasional, Rare) with most other local flora being 'Rare'. After the group undertook control work at the site, surveys in 2014 classified Himalayan Balsam as 'Rare', whilst other local flora ranged from 'Occasional' to 'Frequent'. The site at Matchhills Coppice is part of a Site of Nature Conservation Interest. The trust also state that Giant Hogweed has been reduced by over 80% from the River Char and Catherston Brook.

⁷ Note that these examples are based on information supplied by the LAGs, and where possible verified by ADAS through examination of supporting documentation such as contractor reports and maps.

- Allen Valley Angling and Conservation (AVAC) have succeeded in eradicating Himalayan Balsam from a number of sites along the East Allen river. Overall the LAG describes the river as "pretty much free" of Himalayan Balsam, with just a few sites due to be targeted in subsequent years, and ongoing monitoring to prevent grow back and new sites.
- Eastleigh Biodiversity Partnership have achieved severe reduction of Himalayan Balsam from the Monks Brook catchment, with work "well on its way to eradication." Mapping completed in 2012 shows the extent to which the species has been controlled along the catchment.
- In general, of the 34 species with which LAGs were concerned, 23 were WFD 'high impact' species and therefore a key priority for Defra and LAGs work on these represents an important outcome for the funding as a whole. One example is Water Primrose, for which LAGs are responsible for 5 of the 27 known UK sites. The Defracommissioned 2010 economic assessment stated that early eradication of Water Primrose would £73,000, compared to a possible £242 million if it were to become fully established. That LAGs are part of this early eradication then represents a potentially significant cost benefit to the UK.

Limiting factors in controlling INNS

Although this suggests that the outcomes have been overwhelmingly positive, there are some key factors that have mitigated or limited the achievement of the LAGs in eradicating or severely reducing INNS.

Firstly, the timescale within which the Defra funded projects have taken place is an important factor mitigating outcomes regarding eradication or severe reduction of INNS. A number of the LAGs are finding that in reality the INNS they are dealing with take longer to eradicate than the literature or guidance suggests. Himalayan Balsam has been highlighted by LAGs as a clear example, with the literature suggesting that 2-3 years is sufficient for eradication, but a number of LAGs finding that the same sites are still requiring some control work – albeit at a significantly reduced level – after 3-4 years of ongoing control. Both AVAC and Essex Biodiversity Partnership have reported that they are still undertaking control work on sites 3 or 4 years after having started doing so. Whether this represents a failure to adequately clear sites, or of established knowledge is not clear, but a number of LAGs reported finding that their experience had differed from what the literature suggested. This echoes the issue raised by some LAGs around their hesitancy to claim 'eradication' of INNS, given that control may be required for some time longer than the Defra funding lasts for.

The second important mitigating factor is the geographical scale at which some of the LAGs are operating. Some of the 29 LAGs are operating at a very large geographical scale – that of a large catchment or a county composed of multiple catchments – and this in conjunction with the issue of timescale discussed above, and the limited resources available to some means they have been unable to achieve large scale eradication. Whether those LAGs operating on a similar geographical scale in the longer term would be able to achieve widespread eradication is unclear, given that those LAGs operating on a larger scale are only a few years in to what is inherently a long term approach.

A third mitigating factor is the extent of the INNS challenge LAGs have found themselves trying to address. An unintended consequence of the comprehensive mapping and surveying that many of the LAGs undertook is that a number are now in a situation where they are

facing a bigger, more widespread INNS challenge than they had been aware of when they applied for the Defra funding - by virtue of having more complete knowledge about the extent of INNS in their area. This further exacerbates the issues around time and geographical scale outlined above.

Lastly, another consequence of the more comprehensive surveying that LAGs have undertaken is that some are beginning to recognise that in the areas in which they are working the extent of some INNS is so great as to make it virtually impossible for LAGs to achieve eradication, even those with significant resources. Some interviewees mentioned that new alternatives would be needed to tackle INNS at this scale, for example biological controls such as the rust fungus being developed to treat Himalayan Balsam. Because of the challenges caused by the prevalence of some species in some areas, this is also contributing to the approach mentioned above, where some LAGs have focused more strategically on species or sites in which they have a fighting chance of achieving eradication.

Two short case studies are given below to highlight what LAGs have achieved in control and eradication of INNS.

Control work case study 1 – Dorset Wildlife Trust

- Using £13,528 (of a total £28,921) of Defra funding specifically for control of INNS, Dorset Wildlife Trust's objectives were to develop a control strategy to remove a minimum of 80% (with the long term aim or eradication) of Giant Hogweed currently growing on the River Char and Catherston Brook, to implement and deliver this strategy, and to carry out Himalayan Balsam control using volunteers leading to a significant reduction in the distribution of this species throughout the project area.
- In meeting these objectives, Giant Hogweed was targeted for eradication from the River Char and Catherston Brook (which feeds into the Char). The LAG made significant progress towards this aim, estimating that at least 80% has been tackled with just a few patches of the species remaining. Defra funding was spent on local contractors spraying the Giant Hogweed with glyphosate weed killer, whilst a local farmer was also trained in spraying the species. The landowners in these treated areas will continue to monitor for any re-growth.
- Given the well-established and widespread Himalayan Balsam in the catchment, effective control was difficult. A strategic catchment based approach was used to target 'headwater' sites upstream (to prevent seed from spreading downstream) and to prioritise sites which are of most conservation importance and where eradication is achievable. The species was successfully eradicated from some 'vulnerable' areas such as throughout Bere Stream and priority sites on the River Frome catchment, though there is more progress to be made.

Control work case study 2 – Allen Valley Angling and Conservation

- Using total Defra funding of £9,356, AVAC's objectives were to implement Himalayan Balsam removal across key sites so that within 4 years Himalayan Balsam has been eradicated from the project area.
- AVAC now estimates that it has achieved eradication at some sites on the River East Allen, where there have been no flowering plants for 2 years. More broadly, huge progress has been made with large areas of the river now clear of Himalayan Balsam and regeneration of native species in areas where Himalayan Balsam has been removed.
- The small-scale nature of the Allen Valley project, as well as the fact that it focused just on Himalayan Balsam, meant that active control work was carried out by club members and volunteers rather than any paid contractors. Any sites which either had steep river banks or access issues were assessed on a case-by-case basis with them not being made open to volunteers if deemed too dangerous.
- An existing group of volunteers from the local Area of Natural Beauty (AONB)/Wildwatch group worked on the project on more than one occasion. Whilst local business Sage UK, which formerly part-sponsored the LAG, contributed staff to the project on corporate environmental away days.

Long term management

In addition to specific short-term control and eradication actions, almost all of the LAGs stated that they have initiated long term management actions, examples of which are outlined below. Specifically, this section looks at actions aimed at developing systems or arrangements to support continuing monitoring and action on INNS. These actions typically support continuing work on control and eradication but can also contribute to prevention, early detection and rapid response.

A good example to highlight this crossover is training, specifically training volunteers in how to identify INNS. This is usually done in order to allow volunteers to go out and take part in immediate control work, so could easily be described as control. However, a number of LAGs also saw this kind of activity as long term management, as it builds skills and 'soft infrastructure,' making people more aware and more able to identify INNS in the long term, without the LAG's help. Finally, if volunteers are trained to identify species not yet present in an area, then this could also be described as prevention.

With that in mind, LAGs identified a wide range of activities that they had initiated or were undertaking as long term management, such as: development of plans (either site specific or area-wide); ongoing survey/monitoring; changes to physical geography; further training of volunteers; and further research.

When asked what they were doing to support long term management, the most common response was that the LAG would be involved in ongoing survey or monitoring, to ensure the continuing effectiveness of control work being undertaken. There is an issue here however around how this ongoing work will be resourced. As will be explored in Chapter 5, future funding is something of an issue, and ongoing survey and monitoring will only be possible as a long term management action if LAGs have the time and resources to undertake it.

More notably, some LAGs have produced formal long term management plans, covering either specific sites or catchments as a whole. Stakeholders and partners have often been

involved in the development/adoption of plans, as envisaged in the objective for greater coordination in the GB strategy. The advantage of these formal plans over the somewhat more informal 'will be involved in ongoing survey/monitoring' is that these have the potential to be picked up by other groups or agencies other than the LAGs themselves, and taken forward. For example:

- Ribble Rivers Trust has produced individual site management plans for each of the sites they have done control work on. These plans list relevant stakeholders, landowners, species present, recent control activity and planned future activity.
- Froglife produced a site habitat management plan following on from successful
 control work, which described the current situation and the actions best suited to
 managing it. This has been passed to the local council.
- BEACON has created a Local Action Plan for INNS, with a network of around 20 partners.

Some of the LAGs have also contributed to long term management actions being led by others (for example, LISI is working with ZSL and Kingston University on research into marine monitoring programmes for INNS within the Thames). This has primarily involved forming partnerships to collaborate or work with other stakeholders on INNS in the future, or becoming involved with Catchment Based Approaches in their areas.

Overall, although a significant number of LAGs have initiated long term management actions – predominantly in the form of ongoing survey and monitoring – there are some questions over whether LAGs will be able to enact these, given likely future resource constraints. Indeed, there are a number of LAGs for whom Defra funding has already finished, or is about to finish, who were quite clear that ongoing monitoring was likely to occur as a "labour of love" rather than a formal, resourced process. On the other hand, there are at least a couple of examples of LAGs, such as Tees Rivers Trust or Avon Invasive Weeds Forum, that have obtained further funding – including from local partners - and in these cases there should be optimism that the LAGs' long term management plans will be carried out.

3.2.2. Prevention, early detection and rapid response

Almost all of the LAGs had taken actions which contribute to prevention, primarily in the form of awareness raising and the promotion of national campaigns. Indeed this was the most widespread prevention action reported amongst LAGs, with 26 out of 29 LAGs reporting that they had promoted the campaigns. These are not generally focused on specific species, but rather on encouraging good biosecurity among river users and practitioners. Specific examples of awareness raising activities are given in 3.3.2. along with some short case studies; however it is worth noting here that the amount and extent of awareness raising activity and promotion of national campaigns – *Be Plant Wise* and *Check, Clean, Dry* that LAGs undertook represents a significant contribution to Defra's strategic objective.

In addition, around half of LAGs had taken other actions that contribute to prevention, early detection and rapid response, and these are detailed below. They generally fall into one of three categories: horizon scanning; planning; or early warning systems.

Horizon scanning has generally involved either one-off studies by LAGs to determine those species which might present a risk in future, or ongoing activities to do the same. Some examples of these kinds of activities include:

- London Invasive Species Initiative (LISI) produces a Species of Concern list in which it
 categorises over 50 INNS into six categories, one of which is 'Species not currently
 present in London but present nearby or of concern because of the high risk of
 negative impacts should they arrive.' This list is updated periodically and is also
 shared with project partners such as the London Natural History Society, the London
 Boroughs, the Environment Agency, Wildfowl and Wetlands Trust, Zoological
 Society London etc.
- Bollin Environmental Action and Conservation (BEACON) issue social media alerts to their followers highlighting species to look out for. With approaching 100 followers on Twitter and 200 on Facebook, these are reaching a fairly sizeable audience.

Planning has tended to involve the inclusion of some horizon scanning or risk assessment in larger plans for catchments or areas. Some examples include:

- Tees Rivers Trust have created a Biosecurity Plan for the catchment, which has now been adopted by the Tees Catchment Partnership made up of Groundwork, Flood & Coastal Erosion teams, the National Farmers Union, Northumbria Water and two Local Authorities.
- BEACON's Local Action Plan highlights threats from species not yet present. This
 plan forms the basis for local action and is supported by a network of around 20
 partners including the Environment Agency, National Trust, Local Authorities and
 others.
- Dorset Wildlife Trust have put together an INNS plan for the county, and included a horizon scanning section.

Finally, early warning systems have been established by some LAGs to monitor for specific species of concern, for example:

 Tees Rivers Trust have established an early warning system with port workers and marine fishers to monitor for Chinese Mitten Crab, which is not yet present in the Tees.

Overall, as will be discussed further in 3.3.2. it seems that the amount of awareness raising activity and promotion of national campaigns that LAGs undertook represents a significant contribution to Defra's strategic priorities for prevention, early detection and rapid response. Other than this, a number of LAGs mentioned informal activities like "keeping an eye on things," but it is difficult to conclude that this represents an important contribution. One reason why LAGs are not generally engaged in more specific prevention, early warning and rapid response activities is that many are facing very severe INNS control issues, and may feel that their limited resources are better placed tackling those which are already present.

Where LAGs are engaging in activities geared towards early detection and rapid response however, they have developed a number of processes that appear to be conducive to effectively achieving these goals. Examples such as LISI's Species of Concern list and Tees Rivers Trust early warning system represent good examples of prevention, early warning and rapid response at work. That said, it remains to be seen whether these approaches will be successful in preventing the introduction of target species in the long term.

3.2.3. Key INNS outcomes in summary

The table below summarises the key outcomes, and the key limitations discussed in this section. This captures the main achievements with regards to each of Defra's strategic objectives, not necessarily what is evident across all the LAGs.

		Key outcomes	Key limitations
Mitigation, control, eradication	Eradication/severe reduction	 Comprehensive surveying of large areas, particularly whole catchments in some LAGs. Evidence of eradication of some specific INNS at some, generally smaller sites. Evidence of more general, widespread reduction of INNS from across rivers or catchments in some LAGs. Development of a more strategic, systematic and targeted approach to control across a river or catchment, utilising 'top-down' approaches or targeting priority species. Co-ordination of other local groups and actors. 	 Relatively short timescale of Defra funding, in conjunction with Large geographic scale at which some LAGs are operating, e.g. catchment or county. Greater knowledge of extent of INNS means that some LAGs are now facing a bigger challenge than they previously thought. Recognition that some INNS may be so widespread as to be virtually impossible to achieve eradication.
and rapid response	Long term management	 Long term management plans for INNS, either site specific or area/catchment wide. Forming of partnerships around INNS or LAGs becoming involved with Catchment Based Approach. Ongoing survey and monitoring of LAGs target areas 	 Crossover of actions between long term management, control and prevention. Issue of future funding and resources for LAGs plans to undertake ongoing survey and monitoring of their target areas.
Prevention, early warning and rapid response	Prevention	 Horizon scanning activities, either one off studies or ongoing lists of species of concern. Planning for prevention, in the form of local plans which highlight potential problems and introduce biosecurity measures. Establishing early warning systems to alert LAGs to the arrival of INNS not already present. Widespread promotion of national campaigns – Check, Clean, Dry and Be Plant Wise. 	Prevalence of informal measures for early detection and rapid response, "keeping an eye on things."

3.3 Supporting outcomes

This section reports on the further activities that LAGs have engaged in using Defra funding, and explores the outcomes that LAGs have achieved with regards to awareness raising, training and education, local engagement, and local co-ordination. These have been described as 'supporting outcomes' since they are crucial to varying degrees in LAGs being able to undertake mitigation or prevention work. They are reported separately because these activities tend to contribute to more than one of the INNS specific outcomes in section 3.2; awareness raising for example is a key prevention activity but has also helped to support local participation in control actions. Similarly training in species identification is crucial for volunteers who are new to control work as well as building longer-term capability for early detection.

3.3.1. Awareness raising

Awareness raising was a key component of many LAGs work, and many LAGs had objectives which were concerned specifically with awareness raising. As noted in section 3.2, awareness raising is important to encourage specific prevention activity (e.g. Check, Clean, Dry) but it can also contribute to raising the profile of, and engagement in, local INNS issues more generally.

Two short awareness raising case studies are given at the end of this section to illustrate the type, variety and reach of awareness raising work that LAGs have undertaken.

The baseline situation

LAGs' assessment of the situation that existed prior to the Defra funding was that there was little, if any, awareness raising activity around INNS going on in their areas, although a few LAGs had been doing limited awareness raising before they received funding from Defra. This means that awareness raising is an area of activity that potentially represents significant value added to the situation that existed prior to the Defra funding. That said however, any conclusions have to be made tentatively because of the difficultly mentioned previously around establishing the baseline situation, coupled with the fact that robust evidence of the impact of awareness raising on individual or stakeholder behaviours is sparse. Almost all of the evidence on the follow-on impacts of awareness raising activity was anecdotal; none of the LAGs had formally evaluated impact from these kinds of activity (e.g. before/after surveys of stakeholders or the general population), which is probably understandable given the likely costs of doing so and it not being one of their agreed objectives.

The scope of awareness raising activity

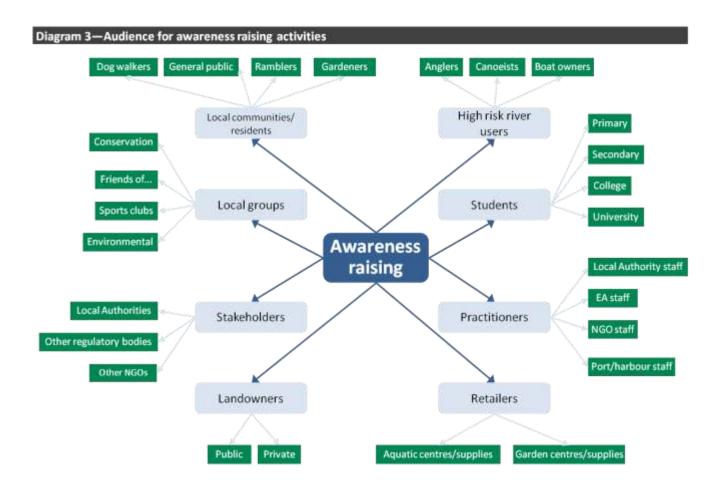
The general aim of awareness raising was to raise the profile and awareness of INNS as an issue, and also to inspire people, groups and organisations to take action. In pursuit of these aims, a wide variety of activities were undertaken, including: events (volunteer events, workshops, seminars, conferences, presentations); distribution of marketing materials (leaflets, posters, signage); attendance and promotion at events; newsletters; media engagement (newspapers, radio, magazines); and online activities (wesbites, social media). Almost all the LAGs promoted the national campaigns. Table 4 below gives approximate number of awareness raising events and attendees for those LAGs for which it was possible to establish this. Note that this is list not exhaustive, and simply represents a summary of those activities for which LAGs were able to provide figures. An example of awareness raising material created by LAGs is also given below.

Table 4—Awareness raising action and audience read	ched
LAG	Awareness raising action and audience
Allen Valley Angling and Conservation	Mail Drop – 70 residents
	Launch/re-launch workshop – 90 stakeholders
	6 Parish Council meeting presentations
Avon Invasive weed Forum	Attendance at Bristol Festival of Nature – 3,000 visitors to EA tent ARKive Blog – 27,000 subscribed users
Avon invasive weed Forum	2 Biosecurity seminars
	At least 3 roadshows
Calder & Colne Rivers Trust	ID/Biosecurity leaflets – 15,000 produced
	2 workshops – 65 attendees
Cheshire Region Invasive Species Initiative	Awareness raising material displayed at 6 garden centres
	2 newsletter articles 2 radio interviews
Cornwall College	Awareness raising messages to 650 primary schools
commun conege	At least 30 workshops and public events
Cornwall Wildlife Trust	Facebook group – 52 members
	Approx 30 awareness raising events – at least 724 attendees
Dorset Wildlife Trust	10 Check, Clean Dry & Be Plant Wise campaigns at shows
Eastleigh Biodiversity Partnership	At least 6 workshops – at least 100 attendees INNS Stakeholder Forum – at least 50 attendees
Eastleigh blodiversity Parthership	9 educational and practical days – 178 pupils, 24 parents, 14 teachers
Essex Biodiversity Project	1 volunteer open day – 50 volunteers
	1 Workshop
Medway Swale Estuary Partnership	Awareness raising with 30 marinas/clubs
Norfolk non-native Species Initiative	Attendance at local events – at least 800 engaged
Nottingham Biodiversity Action Group	2 events – 65 attendees, 36 different organisations represented
Staffordshire Wildlife Trust	Crayfish booklets – at least 1,000 distributed
Tees Rivers Trust	At least 20 events/presentations
	Check, Clean, Dry campaign at 3 WildWatch events
	608 Email newsletters
Tyne Catchment Local Action Group	334 Hard copy newsletters 60 local amenities given newsletters
Wey Valley Landscape Partnership	2 Workshops – 50 attendees
Wildlife Trust for Bedfordshire, Cambridgeshire & Northamptonshire	3 public/stakeholder meetings – at least 100 attendees
a Northamptonshire	a publicy stakeholder illegtiligs – at least 100 attendees

Nb. These numbers are as reported by the LAGs and have not been independently verified. The quality and depth of the awareness raising was most likely variable.



The intended audience for these activities was equally varied, and in general LAGs tended to focus their awareness raising activity on 'key' groups, such as river users or those working on the ground, rather than the general public. Diagram 3 below is an attempt to map out the variety of intended audiences for awareness raising activity across the whole programme of funding.



Outcomes from awareness raising activity

There is insufficient evidence to be able to estimate the reach of awareness raising activities across the LAGs as a whole – although drawing from those figures which LAGs were able to provide, it seems likely to be at least thousands, if not tens of thousands individuals. Despite the extent and impact of awareness raising activity being difficult to quantify, some LAGs have been able to provide robust evidence for the numbers of attendees at awareness raising events, or the number of events held, which goes some way towards demonstrating the reach, if not the impact, of awareness raising in individual cases:

- Tees Rivers Trust has had 586 attendees at awareness raising events, up to November 2014. This does not include revisiting groups, or stands at fairs and shows
- Dorset Wildlife Trust has delivered 30 awareness raising events since 2012.
- Tale Valley's annual river open day attracted 280 attendees in 2013, up from approximately 200 in 2012.
- Eastleigh Biodiversity Partnership held 6 awareness raising events between 2012 and 2013, with 106 attendees in total. One particular workshop at the Parish Council in 2013 attracted 47 attendees from 13 local authorities.

As noted above, while it is possible to map an abundance of awareness raising activities and indicate substantial reach in some LAGs, the evidence of impact relies entirely on anecdotal accounts from the LAGs. These accounts were generally very positive with regard to the impact of awareness raising. Interviewees reported things like a "noticeable" increase in people reporting INNS or contacting LAGs for information; farmers, landowners and local residents taking on the task of clearing INNS from their property; and increasing numbers of

people approaching LAGs at shows or events regarding INNS. So, while the evidence for the impact of awareness raising is certainly not robust in any quantitative way, many of the LAGs perceived that awareness raising activities were integral to what they had been able to achieve in controlling, managing and preventing INNS, where 'people' engagement is often as important as physical actions.

Challenges encountered in delivering effective awareness raising activity

The most significant challenge that LAGs have faced with awareness raising – aside from a reported lack of awareness prior to the commencement of their work – is some resistance to the idea that INNS are a problem, from landowners, other agencies and organisations, and the general public. This has taken the form of those who don't accept that INNS are a significant problem that requires attention, or those who actively encourage some INNS, believing them to be either attractive plants, or good for other wildlife such as bees. This is particularly the case for Himalayan Balsam, and several LAGs have reported having conversations with local beekeepers who have actively encouraged its growth. Of these, one of the LAGs reported successfully explaining the issue with Himalayan Balsam and persuading the beekeeper to remove all of it from his property.

The following two case studies provide examples to illustrate the range of work undertaken by LAGs for awareness raising, and its reach.

Awareness raising case study 1 – Tees Rivers Trust

- Using £900 (of a total £97,900) of Defra funding specifically for awareness raising, Tees Rivers Trust's (TRT) objectives were to raise public awareness of invasive nonnative species issues through talks/workshops, press releases, magazine articles etc, and to promote *Be Plant Wise* and *Check, Clean, Dry* campaigns.
- In meeting these objectives, TRT have released national campaign leaflets, NNSS ID
 documents, posted in parish council newsletters and had stands at local shows,
 focusing attention on local angling clubs and other interested groups.
- TRT have also used local councillors as trusted intermediaries to raise awareness amongst other local groups with which councillors have a pre-existing relationship.
- TRT have also engaged with Middlesbrough Football Club, communicating with their general council and PR department, and leading to online press releases on the Club's website and Twitter page – which has over 58,000 followers – as well as photos with the team promoting TRT's INNS work and the significance of the issue for the local area.
- As a result of awareness raising work, TRT state that they have seen a "noticeable" increase in people reporting INNS or contacting the LAG for information.

Awareness raising case study 2 – Avon Invasive Weeds Forum

- Using £3,700 (of a total £101,576) of Defra funding specifically for awareness raising, Avon Invasive Weeds Forum's (AIWF) objectives were to Run a range of public engagement and awareness raising events to raise the profile of the invasive nonnative species issue locally by focussing on *Be Plant Wise* and *Check, Clean, Dry* campaigns.
- In achieving this objective, Avon Invasive Weed Forum undertook a large range of awareness raising activities, with a particular emphasis on some very well attended events. These included: a meeting at EA Head Office (Bristol); a project Launch Party and re-launch workshop; Parish Council meeting presentations; Promoting Be Plant Wise and Check, Clean, Dry campaigns using interactive displays and ID sheets at third-party events such as the Bristol Festival of Nature; lectures given at Bristol Conservation and Science Foundation; newsletters, leaflets and advertisements in third-party newsletters; and other collaborative events including Broomhill School River Boat trip and Avon Scouts County Patrol Camping Competition.
- In total these events are estimated to have reached thousands of individuals.
- AIWF have also used online methods such as Facebook, and the ARKive Avon Invasive Weeds Forum Blog has over 27,000 subscribed users.

3.3.2. Training and education

The baseline situation

Similar to awareness raising, LAGs' assessment of the situation that existed before the Defra funding is that there was little or no training happening around INNS, although again some LAGs had begun their own training activity prior to receiving funding from Defra.

Scope of training activities

There is, in fact, some crossover here between training and awareness raising, and in some cases it can be difficult to separate the two. LAGs tended to describe educational activities as training where they were focused on volunteers, partners, and stakeholders who were actively involved with the LAGs' work in some way. It often included training in species identification to support either/both immediate control activities or wider awareness and recognition of INNS (Table 4). Awareness raising activities were often aimed at wider audiences to build local knowledge about INNS and deliver the national campaigns but not necessarily to support immediate actions.

As with awareness raising, training involved a range of audiences, including: individual volunteers; local residents; Local Authority and other regulatory bodies staff; NGO staff; corporate groups; school/student groups; partner organisations; and contractors. The difference in the audiences for training, as mentioned above, is that they tended to be individuals or organisations which were actively involved in the LAGs work, as volunteers, partners or other stakeholders.

Most of the LAGs delivered some sort of training as part of their work on INNS. A number of LAGS reported that training was crucial in being able to mobilise volunteer resources given that many had little or no previous knowledge of INNS. Table 5 below shows the focus of this training. Note that some training covered several topics.

Table 5—Number of LAGs who delivered training with a topic focus on			
Training topic focus	No. of LAGs		
ID/surveying/mapping of INNS	21		
Control/management of INNS	18		
Biosecurity	8		
PA1/PA6/PA6(aw) training	5		

These training sessions ranged from the more formal – such as the workshops developed and delivered by the Cumbria Freshwater Invasive Non-Native Species (CFINNS) Initiative – to the informal – such as AVAC's 'on the job' training. As was clearly the intention, judging from the topic focus of training, those who had been trained contributed to the LAGs objectives predominantly by engaging in surveying or mapping of INNS or taking part in control work. Some trainees also contributed to LAGs work by assisting with or taking part in awareness raising activities. Trainees also contributed to LAGs objectives in a number of different capacities: as volunteers for the LAG; as volunteers for other groups or organisations; and as practitioners, such as Rangers or Local Authority staff (see for example CFINNS case study).

ID cards and other materials from the Non-Native Species Secretariat were mentioned by a number of LAGs as particularly useful tools for training. A number of LAGs also suggested that having access to actual samples of the INNS they were delivering training on, ideally at different stages of growth, was a very effective training aid.

Outcomes from training activities

As with awareness raising, the impact of training is somewhat difficult to establish. None of the LAGs conducted surveys of trainees, nor kept records of whether trainees returned to contribute to LAGs objectives, or for how long. Again it is not possible to estimate total reach of training activities across the LAGs as a whole but it is possible to establish some good evidence for the reach of training for some LAGs, that is, the number of people who attended training sessions. Some examples are as follows:

- Ribble Rivers Trust has, to date, enabled 23 volunteers to take chemical spraying qualifications PA1/PA6/PA6(aw).
- CFINNS has delivered 27 training workshops to date, with a total number of attendees currently at 204.
- Cornwall College has delivered extensive training to the student cohort and others.
 ID and biosecurity workshops were delivered to the International Scout and Guide Jamboree in 2013 for example, with 1200 young people taking part.
- NNNSI held a training workshop in 2012 with around 200 attendees.

Table 6 below gives approximate numbers for the total number of trainees, for each of the LAGs for which it was possible to establish this information.

Table 6—Approximate number of trainees	
LAG	Trained
Allen Valley Angling and Conservation	approx 40 trained
Avon Invasive weed Forum	approx 180 trained
Bollin Environmental Action and Conservation	at least 27 trained
Calder & Colne Rivers Trust	at least 19 trained
Cumbria Freshwater Invasive Non-native Species Initiative	at least 204 trained
Cheshire Region Invasive Species Initiative	approx 65 trained
Cornwall College	at least 1000 trained
Dorset Wildlife Trust	32 training events held
Eastleigh Biodiversity Partnership	at least 116 trained
Essex Biodiversity Project	approx 20 trained
Lee & Lincombe Residents Association	1 trained
London invasive Species Initiative	approx 100 trained
Medway Valley Countryside Partnership	at least 60 trained
Norfolk non-native Species Initiative	at least 200 trained
Ribble Rivers Trust	approx 50 trained
Tyne Catchment Local Action Group	approx 60 trained
Wey Valley Landscape Partnership	at least 200 trained
Wildlife Trust for Bedfordshire, Cambridgeshire & Northamptonshire	at least 29 trained
Wiltshire Wildlife Trust	approx 21 trained

Nb. These numbers are as reported by the LAGs and have not been independently verified. The quality and depth of the training was most likely variable.

A number of LAGs mentioned that 'training the trainer' was part of their approach to maximise the reach and impact of their training. Whilst this sounds like a good approach, none of the LAGs were able to provide real evidence of 'cascade training' working in practice. This does not mean that it was not working, but that LAGs did not gather feedback from trainees which would support this claim.

Challenges encountered in delivering training

A crucial challenge for LAGs delivering training was in expending resources in training individuals who are then not obliged to use that training in pursuit of the LAG's objectives – in particular volunteers. This problem is not unique to LAGs and is widely reported in community-led projects, in the research team's experience.

Whilst lack of carry-through from training is less of a concern for those delivering more informal, 'on the job' training, for those LAGs that have put volunteers through formal training such as PA1/PA6 chemical spraying qualifications it is a considerable concern. One of the LAGs for whom this is an issue has taken steps to mitigate against it happening, by holding informal interviews with new volunteers, and by establishing an informal agreement with volunteers by which training is given in exchange for a certain number of hours volunteering⁸.

As with awareness raising, training delivered by LAGs potentially represents an area in which significant (but unquantifiable) value has been added, given the situation as described by the LAGs prior to the Defra funding. Although it is difficult to establish the impact of training, the reach of some LAGs' training activities represents an achievement, and there is substantial

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This type of screening and 'agreement of expectations' with volunteers is a proven good practice approach that has been noted in other Defra community-based programmes, including the Environmental Action Fund and Inspiring Sustainable Living Fund; also in Low Carbon West Oxford in NESTA's Big Green Challenge.

qualitative evidence that trainees have made a strong contribution to LAGs work and objectives. To a varying degree the control work undertaken could not have been delivered without volunteer training because LAGs would not have had the information needed to target activity and/or enough people with technical competence to deliver control activities.

There are also some examples of the development of very successful training programmes, two of which are outlined in the case studies below. The Cumbria Freshwater Invasive Non-Native Species Initiative (CFINNS) training outlined below also represents a strong example of where the Defra funding has catalysed further work; it allowed CFINNS to develop and deliver the initial workshops, which have now become extremely successful and sought after on a local and national scale.

Training case study 1 – CFINNS

- Using £1,390 of Defra funding, CFINNS developed and trialled training workshops designed to foster development and establishment of a monitoring and reporting network for INNS, and train individuals in biosecurity.
- 10 workshops were delivered with Defra funding, with 106 attendees in total, generally to organisations and individual working 'on the ground'.
- 17 further workshops delivered since Defra funding, to a range of organisations and individuals including businesses, national bodies and organisations, with a number of organisations asking for refresher courses as well. Total attendees to date is 204.
- Range of literature and materials produced in response to needs of workshop attendees, for example a pocket INNS ID book, with over 6,000 of these now produced and continuing demand.
- There has been interest from the NNSS in rolling out the training workshop nationwide, and numerous requests from organisations, national and local, to take the workshop.

Training case study 2 – Cornwall College

- Using the Defra funding, Cornwall College delivered INNS training workshops on a very large scale, predominately to young people.
- All students (150 per year group) attended a workshop; 1,200 scouts and guides were trained; whilst 1,125 young people received the INNS training literature.
- In addition, training was targeted at key stakeholders who held positions of strategic importance within the local area. 8 police wildlife crime officers were trained for example; these officers were said to have 'an enormous influence' as they cover the whole county and have relationships with a wide variety of local groups.
- Training literature and materials were developed alongside teachers at the college, helping to ensure that the resources were of a sufficient quality and that they related to the national curriculum. The materials included ID documents and interactive games such as INNS trumps cards.

3.3.3. Local engagement

Local engagement with landowners was a key component of many LAGs' work: indeed a number of LAGs' objectives dealt directly with local landowner engagement. Due to the size of some LAGs' target areas, and the generally complicated nature of land ownership, most LAGs had to deal with a wide range of landowners across the private and public spectrum – from homeowners to farmers, and Local Authorities to the Ministry of Defence.

The overall picture suggests that the majority of landowners encountered were more than happy to allow LAGs and their volunteers to access their land to undertake survey and control work, and that LAGs perceptions were that landowners had relatively low awareness of INNS. Engagement with landowners seems to have been, on the whole, very successful – only around a third of LAGs reported any problems in dealing with landowners, and only in a small minority of cases – and there are plenty of examples of LAGs that have developed good relationships with their local landowners.

- AVAC, for example, has an ongoing relationship with the Allandale Estate which
 owns the majority of the land on which they conduct INNS work. This relationship
 sees AVAC taking responsibility for conservation on the river, including controlling
 INNS, in exchange for access for angling.
- Essex Biodiversity Partnership likewise has established a good relationship with the MoD, who own one of the sites they work on, and are in regular contact with the Major responsible for the land.

These examples are by no means exceptional, and are illustrative of the successful relationships that many of the LAGs have formed with local landowners.

While many LAGs have fostered effective cooperation between LAGs and landowners around INNS, the extent of that cooperation has been generally limited to landowners helping out with control work, rather than any more formal or long term arrangements. There are examples where landowners have taken over control work on their land from the LAG: for example, Cornwall College organised an annual 'Boscastle Balsam Bash' on a National Trust property, which has now been taken up and continued by the National Trust.

There have also been some examples of landowners providing funding. This has either taken the form of cost sharing – for example in Norfolk both the county council and Norwich city council have both shared costs with the NNNSI for control work – or financial contributions – such as Bristol City Council providing funding to the Avon Invasive Weed Forum. These are the exception however, and the majority of contributions from landowners have been in kind, and mostly consist of time for control work. Total self-reported contributions – both financial and in-kind – from all parties are given in annex 3.

Although the overall picture with regards to landowner engagement is a positive one, where LAGs have encountered problems with landowners who are unwilling to engage or to allow access to their land, this has proved to be particularly challenging, and in a number of cases intractable. Not having recourse to any legislative powers has been somewhat of a hindrance, and this is discussed further in Chapter 4.

3.3.4. Data and sharing of best practice

Through the existence of local records centres and national record centres such as the National Biodiversity Network (NBN), there were clearly structures in place for data sharing to occur prior to the Defra funding. Even so, the work undertaken by the LAGs with Defra funding evidently enhanced the previous situation. Almost all of the 29 LAGs were sharing data with local record centres, national databases such as the NBN, Local Authorities, partners, and other agencies. In addition to this, the significant amount of new surveying and mapping which the LAGs undertook, as mentioned above, is likely to have made a significant contribution to the amount of data being produced and subsequently shared. In some cases, this includes data for whole catchments which had not been fully mapped

before. Ribble Rivers Trust, for example, received funding for and subsequently completed surveying of the entire Calder catchment, where previously records were "patchy," and "imprecise and unreliable." Given that data sharing forms part of early detection and rapid response in the GB Strategy, this activity makes an important contribution to that strategic objective.

In terms of developing and sharing best practice, although LAGs were generally learning and developing best practice internally, there does not seem to have been much in the way of widespread or formalised action. That said, the world of INNS is a relatively small one, and a number of LAGs were aware of the work of others, or indeed in contact with them on a relatively informal basis; this was clear from the conversations during the site visits, and evident in the fact that project officers from other LAGs are referenced in various reports and plans that LAGs have produced.

The exception to this lack of formal sharing of best practice is the online LAGs forum and the annual LAGs event, where LAGs were able to meet and to share learning and best practice (for an example of collaboration stemming from the event, see Chapter 4). The online forum was being used by some of the LAGs, and the annual event was attended by almost all of them, although a number mentioned difficulties in attending given the distance they would have to travel, which was compounded by limited resources, and especially acute for those who were purely voluntary. The other exception was the training organised by Defra and run by the NNNSI, which shared best practice with LAGs on how to write successful funding bids.

3.3.5. Local co-ordination

Many LAGs have contributed to the strategic objective of improving local co-ordination in one of two ways, either by co-ordination, working alongside other individuals, groups and agencies within their area towards the same goals or, in some instances, taking a lead role as focus and coordinator around INNS.

Local co-ordination has seen LAGs working with various bodies – such as Local Authorities, the Environment Agency, landowners, local groups and individuals – on issues such as land access, identifying landowners, gaining permissions, and activities such as control work, awareness raising and training. Some examples of this local co-ordination are given in the case studies in chapter 2 under 'Additional finance and resources' and elsewhere throughout the report.

As has been mentioned previously, some LAGs — especially those working at the more strategic level outlined in 'Ways of working' — have played the role of a coordinator in their local area, essentially taking a strategic overview of work on INNS across a larger area, ensuring that work is not being duplicated, identifying gaps, and ensuring that the work of smaller groups fits into a coherent bigger picture. The case study below describes how one LAG has undertaken this role:

Local co-ordination case study - London Invasive Species Initiative

The LISI project, hosted by GIGL, is based on an overarching aim to raise the awareness of invasive non-native species within the GLA area, and focus management on species of most urgent concern. The role of the LAG has therefore centred on co-ordinating between local expertise, biological recorders and local groups to ensure that immediate concerns are prioritised and managed effectively.

The project deliberately chose not to set up volunteer groups but to work with existing networks, including over 600 'friends of' groups and organisations such as the Natural History Museum, Zoological Society of London, Environment Agency, Thames 21 and research institutes. This provided a ready-made framework in which biological records, training, advice, support and practical help could be provided and shared.

LISI were invited to present their work as an example of best practice in managing INNS in an urban environment to the International Union for Conservation of Nature.

Key features:

- Has brought a network of organisations together, allowing for long term, coordinated capacity for INNS work in the London area to be developed.
- Facilitates a significant flow of information to be shared across the region, making quick reactions to controlling priority INNS possible.
- Regular updates of the London-wide species of concern list allows local groups to adapt their awareness raising and other work according to relevant risks.
- The Wandle Trust was supported by LISI to obtain funds from the Big Lottery Fund to deliver a two year INNS-specific project.
- The forum group also provides a means to engage with important stakeholders to deliver the message of the importance of INNS; such engagement influenced local councils to ensure grounds maintenance contracts are only awarded to companies who demonstrate best practice.
- Though harder to monitor its impact, the Initiative's links with such a diverse network of organisations allowed appropriate awareness raising materials to be distributed to a very large range of audiences.

3.4 Summary: value added by LAGs

The preceding sections have outlined the achievements and outcomes from LAGs work, in relation to their own objectives, Defra's strategic objectives, and the cross cutting 'supporting outcomes.' This section draws together these strands to give an indication – generally qualitative – of the value that LAGs have added to work on INNS, and to suggest what it is that LAGs are best suited to achieve.

With regards to Defra's strategic objectives, across the board LAGs have made significant contributions to mitigation, control and eradication by undertaking a great deal of survey work and achieving successes in eradicating or severely reducing INNS across parts of catchments or specific sites – including some that are priority species for Defra and the WFD. LAGs have also – although to a lesser extent – contributed by engaging in strategic catchment or site specific planning for INNS in their area, ensuring that there is an ongoing strategy in place. LAGs have also engaged landowners, galvanised local action, and trained volunteers and practitioners, thus contributing to the 'soft infrastructure' available for control of INNS.

In terms of prevention, LAGs' primary contribution has been in conducting a great deal of awareness raising activity with a wide yet targeted audience, and promotion of the national campaigns. Some LAGs have also established early warning or monitoring systems to prevent the introduction of species not yet present, although these activities are somewhat less common. Finally, LAGs have created and are sharing a good deal of data on the presence and extent of INNS, and in doing so are further contributing to Defra's strategic objective of early warning and rapid response.

The evidence presented in the previous sections suggest that LAGs have a number of particular strengths which represent the contribution that they may be uniquely placed to deliver to work on INNS.

One of these strengths is the ability to mobilise local action – whether that be of the LAGs individual members and volunteers, or of other groups and organisations – around INNS, and to undertake surveying and control work that, if LAGs' assessment of the existing situation is correct, is unlikely to have been carried out in their absence. In a number of cases this local action has been mobilised to the extent that other groups, landowners, authorities or individuals have taken 'ownership' for keeping INNS under control.

Another important strength of LAGs is that of providing and fostering a local presence – and crucially an ongoing presence – 'on the ground.' This local presence has allowed LAGs to create new survey and mapping data, which facilitates both localised immediate control work and also contributes to Defra's wider strategic objectives of early detection and rapid response. Having a local presence also allows LAGs to support ongoing activity and alertness around INNS, rather than just implementing 'one-off' control or management solutions on specific sites. Finally, having a local presence means that LAGs quickly become seen as the 'go-to' source for information or support around INNS in the local area, and thus are able to build lasting and effective relationships locally.

Closely linked to this is the role that a number of LAGs have played in coordinating INNS activity across their area, and providing a localised – often catchment based – overview and strategic direction. In doing so effective LAGs can formulate and implement locally relevant longer term plans for INNS which encompass prevention, early detection and control.

LAGs local knowledge and standing also supports another of their strengths – the ability to engage a wide but targeted range of individuals and groups in awareness raising activity. By targeting local groups or organisations with relevant interests, LAGs make the task of convincing them of the seriousness of the INNS issue easier, and ultimately more successful.

To summarise, the unique value of LAGs seems to lie in their being genuinely local – whether this local is a small stretch of river or a large catchment – and the in depth of knowledge, ability to foster relationships and galvanise action, and provide co-ordination and strategic overview that this entails. Good local, particularly landowner, engagement helps to ensure that control programmes continue to have a legacy that addresses invasive species management and habitat rehabilitation needs into the future.

On the balancing side, the LAGs funded by Defra have tended to focus more on mitigation and control actions than prevention or early detection (though this was determined by their funding agreements to an extent); and the audience reach, and impact on behaviours, of

their extensive awareness raising work is not known. They also appear to be perpetually resource-constrained and the smaller groups, while making an important local contribution, can only make a small contribution to larger strategic objectives simply by virtue of their size.

The case studies below give an indication of what LAGs are able to achieve, by presenting examples of funding provided to LAGs by Defra, what that funding was specifically allocated for, and what outcomes and achievements have come from this:

Inputs, outputs and key achievements 1 – Essex Biodiversity Project

Inputs

Total Defra funding - £10,129

£4,281 Active control of Himalayan Balsam (with volunteers)

£3,000 Surveying the Roman River for INNS

£2,250 Awareness raising- 5 educational school days to be held to raise INNS awareness and foster local involvement

£343 Landowner/Volunteer training

£255 Awareness raising- develop and release Essex River Survey and management handbook

Key outputs

- Walked and mapped 15km of Roman River for the first time, gave them awareness of H. Balsam confined to 3.2km stretch of river;
- Based on mapping, photos and observation, actions achieved an estimated 60-70% reduction in H. Balsam in the targeted area;
- 9 x educational and practical days delivered- 178 pupils, 24 parents and 14 teachers participated;
- 900 Volunteer Hours; and
- 20 people volunteers, landowners and other local people trained at a specific event. Other volunteers trained as they went out on control days.

Key achievements/challenges

The LAG managed to survey 15km of the Roman River for the first time- identifying H. Balsam in a confined 3.2km stretch. After a concerted effort to eradicate the species from the area, it was estimated that approximately a 60-70% reduction was achieved; members of the project were realistic in their assessment that full eradication would require work to be carried out over a 4 to 5 year period.

Volunteers made a vital contribution to the control of Himalayan Balsam; although retention was highlighted as being difficult, the LAG explained that it was hard to retain volunteer interest due to the repetitive nature of Balsam pulling. Despite not managing to release the planned Essex River Survey and management handbook, awareness of INNS in the area was raised, primarily through educational workshops delivered to local schools.

Despite some successes, the LAG has not secured any further support for INNS work since their Defra funding ended in 2013. Control of H. Balsam on the river Roman has therefore continued only in a limited form, with staff and interested local people contributing their time if and when possible.

Inputs, outputs and key achievements 2 – Tees Rivers Trust

Inputs

Total Defra funding - £97,900 £79,500 Project Officer post £9,000 Active control of Giant Hogweed (carried out by contractors) £7,500 Volunteer training, co-ordination and equipment £1,000 Surveying £900 Awareness raising

Key outputs

- 10,568 volunteer hours;
- 22 volunteers trained, with 19 of them still actively taking part in INNS work. 1 contractor was trained in exchange for 10 days control work- carried out on Giant Hogweed; and
- Built knowledge of the distribution of INNS and now mapped the catchment electronically- adding at least 60% to initially 'patchy' awareness.

Key Achievements/Challenges

Tees Rivers Trust – who mapped the whole catchment for INNS – began the project with very patchy data, estimating that the subsequent mapping they carried out added at least 60% to their knowledge base. This surveying allowed specific sites to be targeted, with work beginning to be carried out on Giant Hogweed, Japanese Knotweed, Himalayan Balsam and Rhododendron, though the considerable scale of the problem, as well as gaining permissions from the EA were highlighted as barriers to control work.

The outstanding success for the project, though difficult to quantify, was in coordinating a variety of initially disparate local groups, to implement a top-down, strategic approach to survey, monitoring and control of INNS in the catchment, with a focus on Giant Hogweed. Other positives included a strong retention rate of volunteers trained- attributed to a deliberate decision to target training at those who are committed and unlikely to move away, ensuring that the expenditure on training was worthwhile. Success was also reported on the use of some less conventional awareness raising methods- engaging local groups through local ward councillors for example.

At the time of writing the LAG had secured funding for the next five years for INNS work in one-third of the catchment, with efforts being made to pursue other support for the rest of their work. It was however, emphasised that INNS work in the area is at an early stage and that building on the momentum and capacity built up through the project is essential if a considerable impact is to be achieved and sustained.

Inputs, outputs and key achievements 3 – Ribble Rivers Trust

Inputs

Total Defra funding - £15,750

£6,000 Active control of Himalayan Balsam, Giant Hogweed and Japanese Knotweed

£3,750 Volunteer recruitment and training

£3,000 Surveying all headwater streams in Calder catchment for INNS

£3,000 Awareness Raising

Key outputs

- Surveyed/mapped 90% all of the streams in the catchment (those that they consider of worthwhile size). 304 records of INNS publically submitted via the website and added to mapping between Nov 2011 and Nov 2014;
- Approx 50 volunteers trained- 27 attendees at workshop, 23 other volunteers spray trained;
- Defra funding contributed to purchase of: 7 knapsack sprayers, 6 injection duty kits, 1
 Stihl brushcutter, 4 grass slashers, 1 pair of shears and protective equipment/clothing;
 and
- 1,319 volunteer hours and 155 landowners engaged with throughout the project.

Key Achievements/Challenges

Surveys of all the main tributaries in the catchment were carried out and invasive species maps of the catchment are now considered to be fairly comprehensive. This allowed site management plans, cost analyses and species risk assessments to be developed.

Some successes in controlling H. Balsam at specific sites (such as Towneley Park) were reported, but there is an acceptance that the species is effectively out of control, particularly in the lower reaches of the catchment. The LAG would therefore like to shift focus onto the more realistic goal of controlling and eradicating Giant Hogweed and Japanese Knotweed; though it is acknowledged that several years of effort are likely to be required to achieve control in both cases.

On a more positive note, Ribble Rivers Trust can be said to have effectively coordinated 3 pre-existing (smaller scale) Local Action Groups with a catchment-based approach; achieving 'top-down' and systematic survey, monitoring and control of HB, JK, GH. They enabled Pendle Environmental Action Group to assume responsibility for the control of JK within the catchment- control of INNS has now become the main focus of this group, which is now considered to be approaching self-sustainability.

The LAG also built a very good relationship with the Environment Agency's Invasive Species Officer, resulting in a streamlining of the permissions process. Landowners were also cooperative, though any efforts to build their involvement and share costs were not successful. Moving forward, the LAG is awaiting to learn the outcome of their application to the Big Lottery Fund, which includes plans to roll their model out across the county.

4 Enablers and barriers

Enablers and barriers summary

- 'Organisational capacity and expertise' was a significant enabler, and included elements such as the value of a project coordinator, being able to draw on skills from within or outside the LAG, and independence from regulatory agencies.
- 'Participation of volunteers' was also an important enabler, and included working
 with existing groups and volunteers, the attitude of the community towards LAGs
 and being able to draw on specific skills from volunteers.
- 'Relationships with key stakeholders' was another enabler, and included the value a 'host' organisation could bring to LAGs.
- Resources and time to focus on INNS was a key barrier to success, where LAGs had large areas to cover, or challenging physical geography to overcome.
- Landowners who were unwilling to engage presented a barrier to LAGs, exacerbated by the lack of 'regulatory frameworks' to compel cooperation.
- 'Being able to secure funding from sources other than Defra' was a significant barrier to LAGs future sustainability.

This chapter explores the factors that have enabled LAGs to succeed in their work on INNS, and those that have acted as barriers to success. It also looks at the extent to which the Defra funding enabled LAGs to achieve outcomes that they would not otherwise have been able to.

During interviews with the 29 funded LAGs, interviewees were asked whether certain factors had acted as either an enabler of success, a barrier to success, or both during the Defra funded period. They were then asked to what extent each factor had acted as either an enabler, barrier, or both by giving them a score of 1 'not significant' to 5 'very significant.' Table 7 below gives a count of the responses to each factor, and a count of respondents who rated each factor a '4' or '5'.

		Enabler		Barrier	
Factor	Count	4 or 5	Count	4 or 5	N/A
Organisational capacity and expertise	28	26	9	0	
Being able to secure funding from sources other than Defra (whether match funding or other)	18	10	11	5	3
Being able to access in-kind support/resources from partners or stakeholders	27	18	5	1	
Relationships with key stakeholders	28	22	5	2	
The location and species the LAG has chosen to focus on	23	14	12	4	2
The specific activities our LAG has chosen to undertake	27	20	4	1	1
Access to external guidance, toolkits or best practice knowledge	25	14	5	4	
Access (availability or cost) to tools, equipment, hardware for INNS activities	21	12	12	2	1
Regulatory frameworks	16	4	14	5	4
Local authorities	19	7	6	2	6
National or EU policies	21	6	5	0	4
Attitudes of the local community	26	18	8	2	1
Participation of volunteers	28	24	2	0	
Retention of volunteers	23	13	9	0	2

Nb. The total responses to this exercise were 28, as one of the LAGs did not complete the exercise

Those that were considered the most significant – those which were given a '4' or '5' most frequently by LAGs – are discussed in the following sections, alongside additional insights that were gained during the ten site visits.

4.1 Enablers

The factors which were considered to be the most significant enablers by the 29 LAGs during the telephone interviews were:

- organisational capacity and expertise
- participation of volunteers
- the specific activities our LAG has chosen to undertake
- relationships with key stakeholders
- being able to access in-kind support/resources from partners or stakeholders
- attitudes of the local community.

These results generally align with what LAGs reported in the site visits, and this is explored in detail below. For presentation purposes the key enablers have been divided into those that are internal to a LAG and how it is organised, and those that relate to the LAG's external operating environment.

4.1.1. Internal

Organisational capacity and expertise

This dimension was both cited as an enabling factor by all 28 of the LAGs who responded, and rated a '4' or a '5' by 26. The site visits provided further qualitative evidence on how organisational factors had contributed to LAGs' achievements.

Firstly, the value of having a project coordinator who is able to focus exclusively on INNS and drive the work of the LAG was seen as an extremely important enabler. Defra supported paid co-ordinator roles in many of the LAGs – 21 out of the 29, although the amount of time Defra funded varied greatly, from a full time coordinator to less than half a day a week – and it seems likely that the LAGs with large geographical remits and extensive work programmes would not have been able to operate without a paid co-ordinator.

Project coordinators were seen as providing some continuity on the issue of INNS over time, as being a focal point and a point of contact for both the LAGs and for other interested parties in their area, as well as providing a more strategic overview for INNS work. The role of the project coordinator was variously described as "crucial," "vital" and "essential." This seems to be the case even where LAGs did not have a paid coordinator — that a motivated member of the LAG who took responsibility for driving their work forward and coordinating efforts was crucial to success. This crucial role for leadership and single-minded direction also accords with the wider evidence on community groups⁹

Another aspect of 'organisational capacity and expertise' that was reported to be a key enabler was the ability to draw on existing skills and expertise. This could either be 'in house' – drawing on the skills and expertise of the project officer, other members of the LAG, or their host/parent organisation – or outside. The ability to engage and bring on board outside experts was seen as crucial by some LAGs, especially where outside experts can lend skills that smaller LAGs do not necessarily have in house.

Finally, a number of the LAGs who took part in site visits cited their independence from statutory or regulatory bodies such as the Environment Agency as being an important enabling factor, particularly with respect to local engagement. A number of LAGs mentioned that they had encountered landowners who were mistrustful or openly aggressive towards such bodies, whereas the LAG's independence helped to smooth the process of engaging with landowners, and ultimately working on their land.

Effective recruitment and deployment of volunteers

'Participation of volunteers' was a very important enabling factor, cited as an enabler by all 28 of the LAGs, and given a '4' or '5' by 24. Although Defra asked LAGs to record volunteer contributions in terms of hours, the resulting data was assessed as not being robust enough to provide the basis for a reliable estimate across the LAGs as a whole for the Defra funding period. The data as reported by each LAG (but not further verified or amended) is provided in Annex 2. While it is not possible to say precisely how much volunteer effort was catalysed, the various documentary and qualitative evidence sources show that it was substantial and in most cases crucial to what the LAGs delivered.

Again, a number of different elements relating to volunteers were discussed during the indepth interviews with the 10 site-visit LAGs. In general, like a project coordinator, volunteers were seen by many of the LAGs as "vital" to the work that they were doing. For the types of

⁹ For example, see NESTA's Big Green Challenge.

control work that many of the LAGs engaged in – particularly manual pulling of INNS – it was really a case of the more bodies available the better. Given that a number of LAGs are also covering large geographic areas, being able to draw on volunteers from across that area was also crucial.

As was mentioned earlier, the species that LAGs were working on impacted on which control methods they were using, in turn impacting on their ability to use volunteers, and therefore how central volunteers were to their work. Given the health and safety concerns with controlling Giant Hogweed for example, and the additional training required for chemical spraying treatment, LAGs addressing this species tended to rely less on volunteers. That said, there were still a number of LAGs putting volunteers through chemical training for precisely this purpose.

A significant enabler with respect to accessing or recruiting volunteers was the practice of working with existing groups and volunteer bases. Quite a number of the LAGs were taking this approach, and it appeared to be very successful. Reasons given for the success of this approach were that existing volunteer groups tended to be already engaged with issues similar to those the LAGs were promoting, and were therefore easier to persuade of the value of INNS work. Groups such as 'friends of,' conservation groups, angling or boating clubs, AONB volunteers, Wildlife Trusts, Rivers Trusts etc are all groups that tend to have a vested interest and general concern for the health of the local or river environment, which LAGs found relatively easy to convert into action on INNS, as opposed to recruiting and encouraging new volunteers with no previous or similar interest.

Closely linked to this, a number of the LAGs reported that the general enthusiasm from existing local groups for making INNS part of their remit was an important enabler. This finding also accords with the fact that in interviews with the LAGs, 26 said that 'attitudes of the local community' was an enabler, and 18 rated this '4' or '5'. A good example is the Pendle Environmental Action Group who, under the guidance and co-ordination of Ribble Rivers Trust, have wholeheartedly taken up the INNS cause, and since become a completely self-sustaining group. Other examples of this catalysing effect from the LAGs' work have been reported. Given the reported success of this approach in terms of extending a LAGs reach it seems to represent a good example of best practice among LAGs.

Finally' several LAGs reported that they had been able to draw on specific skills from volunteers – such as administrative skills, graphic design or web design skills – which represented an important enabler and added value to the LAG's capabilities where it arose

4.1.2. External

The two most prominent external factors that the 29 LAGs identified as being important enablers were 'relationships with key stakeholders' and 'being able to access in kind support/resources from partners or stakeholders'. Examples of how this has worked are given in chapter 2 and in section 3.2.3 which considers LAGs role in local co-ordination.

One of the key elements here was the benefit of having a close relationship with local records centres, where they exist, in terms of getting access to existing data on INNS and also being able to share data. This was particularly relevant for those LAGs that were hosted by local records centres, or at least in the same place. Not all of the LAGs found it easy to access local data, however, and this is covered further under "barriers" in section 4.2.2.

More broadly, a number of the LAGs talked about 'host' organisations being valuable enablers. Some examples were given of councils being helpful in "unlocking" landowners, or Rivers Trusts having a wider remit across rivers and being able to draw on set of volunteers already engaged with work on rivers.

LAGs were also generally very positive about the various materials they were able to access through the NNSS, and many talked about using these rather than "reinventing the wheel".

Finally, the online forum and the annual LAGs forum were both mentioned as very helpful by quite a few LAGs, in that they allowed LAGs a good opportunity to meet others, to share experiences and best practices, and in some instances had led to some partnership working. The best example of this is the INNS education packs developed by Cornwall College and CFINNS, which came about after the project officers met at the annual LAGs forum.

4.2 Barriers

The factors which were considered to be the most significant barriers by the 29 LAGs during the telephone interviews were:

- being able to secure funding from sources other than Defra
- the location and species the LAG has chosen to focus on
- access to external guidance, toolkits, or best practice knowledge
- regulatory frameworks

As with enablers, these barriers generally aligned with those reported during the site visits although the site visit interviews also offered some additional insights into barriers to control work, so these are also explored below.

4.2.1. Internal

Resource constraints

One of the key barriers that came out during the site visits was the issue of resources and time to focus on INNS. As has been repeatedly noted, some LAGs are working in very large geographic areas such as large catchments or counties, some have project coordinators who only focus on INNS work part time, and some do not have paid project officers at all, so in general there is a sense of working with limited resources spread over a large area.

Limited resource combined with multiple demands is obviously a barrier to LAGs achieving more widespread eradication of INNS, as they do not necessarily have the resources to do so, but it can also prevent LAGs from doing activities such as chasing up trainees to see whether training really has been 'cascaded,' which might give LAGs more evidence of their achievements. Even with the additional resource secured through volunteers to do the 'legwork' on control activities LAGs can remain resource constrained in terms of the stretch on leadership and management resource. This also ties in with the barrier around difficulty accessing funding, covered in section 4.2.2 below.

The location and species the LAG has chosen to focus on

In the context of having modest resources, 12 of the 29 LAGs reported barriers related to the species they were focusing on. As noted earlier, some LAGs have found a mismatch between

their initial expectations when they applied for the Defra funding and the reality on the ground when it comes to control. Since starting work on the ground (mapping and control) some LAGs have found that the scale of the problem they face is much more widespread than they originally believed. In addition, a number of LAGs applied for funding and planned work based on good practice guidance and local information that, in reality, turned out to be misleading. This has been the case for a number of LAGs who have found that they are still attempting to eradicate INNS after 3-4 years which guidance told them should take 2-3. A few also noted that it would have been useful to employ contractors at one point or another, but they were unable to because of a lack of funding.

While it is more of a fixed external barrier than an internal operational one, the physical geography of the sites where the target species were located was raised in a number of the site visits. Quite a few of the LAGs had sites which were either very inaccessible, or for safety reasons were not suitable for working on with volunteers. This was not necessarily an issue for those LAGs that had funds available for employing contractors, but for those that did not it represented a difficult barrier. As noted earlier, the overall geographic scale of some LAGs areas was also challenging in terms of LAGs' capacity to deliver control work with comprehensive coverage.

4.2.2. External

Relationships with key stakeholders

This was an important barrier for a small number of LAGs in the short interviews with the 29, as well as being an enabler for many as well. One element of this factor which acted as a barrier to LAGs work was highlighted in Chapter 3, that of the challenge of engaging with or persuading landowners who resisted LAGs work. As was mentioned, the majority of landowners were happy for LAGs to conduct survey and control work on their land, with some even joining in, but approximately a third of LAGs met with some resistance from landowners. In a number of these cases, LAGs found that where they met with resistance from landowners this issue was highly intractable because they had no legal recourse, as is outlined below.

Also with regards to landowners, some of the LAGs noted that being unable to identify landowners was a key barrier, where records were out of date, held in different places, and the complexity of ownership around land, rivers and riverbanks made it challenging to identify the correct landowners.

Although relationships with local records centres were cited as an enabler, and data sharing practices among the LAGs were good, a few LAGs who took part in site visits mentioned that there were some issues with the flow of data from a national to a local level, i.e. that the data sharing relationship was not quite as effective in the other direction, and that they had encountered difficulties in accessing nationally held data relevant to their work.

Regulatory frameworks and statutory bodies

Of all the factors included in the list presented to LAGs in the initial interviews, 'regulatory frameworks' was the one that was mentioned most often as a barrier, by half of the LAGs.

More specifically, the lack of legislative powers to force landowners to comply in situations where they were unwilling to voluntarily do so was mentioned quite widely during interviews, and confirmed during the site visits. Interestingly, only one LAG was aware of –

or at least mentioned – Species Control Orders as part of the Infrastructure Bill which might present a solution to this issue in future.

Also around 'relationships with key stakeholders,' several LAGs reported that statutory or regulatory bodies, such as the Environment Agency, had proved to be a barrier to engaging in control work. This was not a widespread complaint but two groups in particular had experienced issues with gaining consent for chemical spraying, and saw this as hindering their ability to effectively engage in control work. The problem turned on the issue of having to apply for consent for each individual site or session of control work, which one had managed to overcome by getting buy-in from the local consenting officer and effectively establishing "blanket" consent for the LAG to engage in control work. One LAG also mentioned that they felt they were seen as the "amateurs" on INNS by statutory/regulatory bodies who saw themselves as the "professionals".

On balance across the 29 LAGs, local authorities tended to be seen as enablers rather than barriers, although six of the LAGs cited councils as barriers to their work.

Being able to secure funding from sources other than Defra

This was a widely reported (11) barrier for LAGs, and was raised as a key concern for LAGs going forward during the site visits. This issue is explored further in Chapter 5, but needless to say, the source and amount of future funding to keep projects running was an important concern for almost all of the LAGs.

5 Future of the LAGs work on INNS and the wider legacy

Future and wider legacy summary

- Only a handful of LAGs have secured future funding, and this tends to be funding into which INNS can be 'shoehorned.'
- Some of the LAGs have made funding bids, but are waiting for the results of these.
- The majority of LAGs do not have future funding and have not currently made any bids.
- Some LAGs are forming partnerships to take their work forwards.
- There are other potential models such as commercialising some of their work which most LAGs have not explored.
- There is qualitative evidence that some of the LAGs work will be 'mainstreamed' if they do not continue.
- If LAGs do not continue, the important role they have played in coordinating INNS efforts across an area or catchment is likely to be lost.

This chapter identifies if, and what, work that was supported by the Defra funding will continue once that funding ends. It seeks to identify how LAGs will take forward any ongoing work, and if there is any wider momentum that has been created which will continue.

5.1 Future action on INNS by the Defra-funded LAGs

A summary of what the LAGs reported about their future plans is given in Annex 3. The level of detail and confidence is greater for the 10 site visit LAGs where this aspect was probed while only headline information was captured for the other 19 LAGs in the initial interviews.

The overall picture for the future of the work that was supported by Defra funding is one of uncertainty. Detailed information for each LAG is provided in Annex 3.

Almost all the LAGs have the intention to continue or expand the work they have been doing. For example, some aim to continue with the 'top-down' approach to the catchment they have begun under the Defra funding, some aim to roll out the LAGs model to other areas or catchments, while others aim to simply continue to focus work on their target area and complete the job of eradicating INNS. Almost all the LAGs, as highlighted in Chapter 3, intend to continue to be involved in ongoing survey and monitoring. The reality, however, is that many, if not most, of the LAGs do not know how their intended future work will be funded or resourced.

5.2 Future funding and income

Progress towards securing future funding

Like all community-led groups, LAGs survive on a mosaic of funding that combines grants from different sources with whatever locally generated donations or in-kind contributions can be secured. A key difference made by the Defra funding was to enable a single and explicit focus on INNs as opposed to groups having to 'shoehorn' themselves into funding programmes that have a broader remit.

Overall, three different types of approach to resourcing LAGs future work are evident:

- Continued heavy reliance on grant funding, including a small number of LAGs that are not exploring alternative options
- Support from partners to secure income directly and/or to transfer some of the LAG's current work to partners who are already involved (mainly in large catchment or county-wide initiatives, for example Staffordshire Wildlife Trust.
- Absorbing INNS work within the 'parent' organisation (e.g. a river or wildlife trust), but on a less intensive basis, for example Essex Biodiversity Partnership.

At present, only a handful of LAGs have managed to secure any sort of funding to take their work forward. Notably, given the above, even amongst those LAGs that have managed to secure some future funding, it is not funding specifically for INNS but rather other funding into which INNS can be "shoehorned". For example:

 Tees Rivers Trust have secured funding through Tees Rediscovered (another local interest group) and their bid to the Heritage Lottery Fund, which means that their INNS work is secure for the next 5 years. However, the funding only covers roughly a third of the geographic area that the LAG covers.

It is notable then that on the basis of what LAGs have reported about their future plans, it seems likely that the situation for many will revert to this previous state of accessing, or attempting to access grants from funding programmes with broader remits: a number are pursuing funding from programmes such as the Big Lottery fund, Heritage Lottery Fund, the EU and the Environment Agency and others. LAGs reported there is no dedicated source of grant aid for INNS that they can access apart from the Defra funding.

The result of this situation for those LAGs which have secured funding is that there is a possibility that their work, or the focus of it, may shift in future to accommodate the priorities of new funders, and LAGs may be unable to continue their INNS work in the way they currently intend.

One of the key difficulties highlighted by a number of LAGs in securing future funding was exactly this lack of funding *specifically* for INNS. Many of the LAGs stated that the fact that the Defra funding had been focused specifically on tackling INNS had, for obvious reasons, expedited this task.

Whilst only a handful of LAGs have actually secured funding, there are others that have made bids for funding and are waiting on the result of these. For example:

 Ribble Rivers Trust have applied for funding through the Big Lottery to roll out their model to further catchments – the Wyre and the Lune. This would involved replicating the model of the INNS work in the Ribble Rivers Trust, with strong links and partnership working between the three.

For those LAGs that do have funding bids currently waiting however, it seems to be the case that they do not have a backup plan. If the bids they have made are unsuccessful, then they are not sure where else to turn for future funding.

Finally, and this probably represents the majority of LAGs, there are those that do not have any future funding and have not made any bids, or are currently "exploring options" for future funding. There was a general sense from all the LAGs that the funding environment is extremely challenging at present, and that funding – particularly funding specifically for INNS work – is very hard to come by. Whilst "exploring options" sounds promising, given that the Defra funding for LAGs stops in March 2015, it is possible that what this in fact represents is a situation of having no future funding and being unsure where to find some.

Challenges in securing future funding

There seem to be a number of key challenges which have contributed to the situation with regard to future funding outlined above. The challenges relate principally to a mix of three factors:

- A lack of national or other grant funds specifically for INNS beyond the current Defra funding;
- The limitations of attracting grants or income through other channels; and
- The balance that LAGs have to strike between delivering activity on the ground and investing time in developing sustainable income models, when they have limited resources.

Lack of dedicated grant funding for INNS

As noted above, the lack of such funding appears to have two potential outcomes. Firstly, LAGs can secure grants for individual actions on INNS, or parts of their work programmes, but - based on what LAGs reported - there does not appear to be anything comparable to the Defra funding which enables LAGs to take on a more strategic and co-ordinated approach. Secondly, the grants that are available may require LAGs to 'shoehorn' their grant applications to fit with funding criteria that are not primarily concerned with INNS, which could mean a shift in focus that does not necessarily fit with what they see as the highest priority work.

As a result, while none of the LAGs explicitly said they were reluctant to pursue alternative grant funding, the research team developed a sense, in some cases, that LAGs either could not see where they could fit to secure further grant funding, or they may have been hesitant to pursue funding that would shift the focus of their work. This may have contributed to the prevalence of the response "exploring options for future funding" as individual LAGs try to work out the best approach, and compromises, for their future work.

It needs to be borne in mind here that the research was conducted in autumn 2014, six months before the end of the Defra funding, so some of this exploratory work may have resulted in more concrete funding by March 2015. That said, the research team retains the view that there are significant risks around the amount of Defra-funded LAGs work that will be reliably funded into the future.

Access to income from other channels

This is not to say however that there are not any sources of funding potentially available to LAGs which may be suitable for resourcing their continued work in the future. The evidence collected in this research showed that some LAGs had been able to access other time-limited funding from local partners but not yet on a sufficient scale to free them up from grant funding. In fact, it is likely that the Defra funding (and the work it supported to demonstrate what LAGs could achieve) was crucial to opening up other funding channels.

Looking forward, around a third of the LAGs are looking to support some of their future work through partnership activity of different kinds - though it is evident that almost all of these are in the very early stages of development and none could be said to represent sustainable, long-term, income models. Examples where LAGs have been forward looking in this respect and have had some success include the Avon Invasive Weeds Forum, Tees Rivers Trust and Norfolk Non-Native Species Initiative. These LAGs are confident their approach will allow them to continue their work in the same, or at least a similar fashion which suggests other LAGs could learn from their experience.

Time and resource constraints

LAGs reported another issue which is likely compounding the other challenges they face with respect to funding, namely a lack of time and resources to dedicate to the search for suitable sources of funding. As mentioned in chapter 4, resource constraints were a key internal barrier for LAGs, and especially for those where their project officer was not funded to work on INNS full-time or was a voluntary post.

Given the scale of activity that many LAGs took on under the Defra funding - in terms of their work on surveying and controlling INNS, as well as undertaking awareness raising, training, landowner engagement and other activities - it is entirely possible that some, if not many, LAGs applied more resources to these tasks rather than that of searching for and securing future funding. While this was not explicitly mentioned by LAGs during the research, it is one possibility that may explain the general lack of progress in achieving funding going forward.

Overall then, these challenges – possible reluctance to pursue funding not specifically for INNS, a recognised lack of such funding, slow-burn of alternatives, limited time and resources on the part of the LAGs, and possible prioritisation of direct INNS work over more forward looking tasks – taken together create a situation in which it is understandable why only a handful of LAGs seem to be well advanced when it comes to future funding, and why many are still "exploring options."

Other approaches

One notable exception is LISI, who are perhaps the only LAG truly looking to commercialise their work in order to make the LAG self-sustaining in the long term. LISI are looking to follow in the footsteps of their host and parent organisation, Greenspace Information for Greater London (GIGL), and make the LAG into a commercial, but not for profit entity, such as a Community Interest Company. It is difficult to know how successful this approach will be but LISI will have access to GIGL's experience and expertise in undergoing this change which will contribute to its chances of success.

Whether this approach could also be adopted by other LAGs is difficult to say because LISI has a very distinctive operational model which differs significantly from other LAGs. In

particular, due to its close relationship with GIGL and having established itself as the 'go to' body for INNS in the Greater London area, it is already operating in many respects as a service provider to other ecological action groups across London – and therefore has existing 'client' and 'service' relationships which it could commercialise. It is clear that other LAGs have elements of their work that could be commercialised, such as the training workshops developed and delivered by CFINNS, or the education packs developed by Cornwall College and CFINNS, although the scope and scale of the market for these products would need to be determined further before investing in such a route. With a couple of opportunistic exceptions, it does not appear that LAGs have so far tried to charge for their control services to landowners or other interested stakeholders, or to commercialise their expertise or data.

There are some examples where LAGs have managed to instigate cost sharing mechanisms for some of their work, for example:

 NNNSI undertook some control work for which they shared the cost equally with Wickes, and has also established cost sharing on some work with Norfolk County Council and Norwich City Council.

It seems unlikely however that this can sustain them in their current form into the future. The real barrier to the more widespread adoption of income generating models may be that other LAGs simply lack awareness of it as a possibility, or the business experience to be confident in taking it forward or, we could speculate, the desire to take on the non-trivial responsibilities of running a commercial enterprise. Clearly, running a business is very different from having a passion or vocation for tackling ecological problems.

5.3 Further considerations and risks

A question of scale

Despite the slightly bleak picture painted above, it is not the case that there is no hope for LAGs and their continued work on INNS. As has been the case throughout, the size of a LAG and the geographic scale at which it is working have an impact on the work it will, or at least plans to undertake in the future, and therefore on the means and resources by which this work will be completed.

For smaller LAGs – smaller in terms of the geographic area that they cover, the scale of their work and the funding they received from Defra – it is possible, if not likely, that their future resource and funding needs will be limited and able to be met from within the LAG, or purely by volunteer work. For example:

- Lee and Lincombe Residents Association, for example, estimates their costs to be only in the hundreds of pounds, and is confident these can be met with some small scale local fundraising.
- AVAC feel that given the small scale of the work going forwards, that it is possible it
 can be completed purely by volunteers, with no need for any additional funding.
 This will however limit their ability to hold events such as coordinated volunteer
 days.

For larger LAGs however this is clearly not the case. For them, the future is uncertain but there are some indications that the work they have been doing will not simply cease. Despite the difficulty in assessing the impact of awareness raising work, there is qualitative evidence

from the LAGs that they have managed to raise the profile of INNS as an issue within Local Authorities, local Environment Agency offices, National Trust properties, Natural England, Wildlife Trusts and others, and that in the event that the LAGs do not have resources or funding to continue their work it is possible (though by no means certain) that some of these organisations may step in. In addition, in some areas LAGs have successfully supported and coordinated 'lower level' groups — such as Pendle EAG mentioned previously, and Friends of Hocombe Mead in Eastleigh — to become self sustaining, and in these instances work in the areas these groups cover will continue.

Some LAGs are also forming partnerships that hold out the prospect of giving them access to more resources to continue their work, even in the absence of funding, and open the doors to other sources of funding, for example:

 Tees Rivers Trust has formed the Your Tees Catchment Partnership, led by the trust and involving Groundwork, Local Authorities, the National Farmers Union, Northumbria Water, Flooding and Coastal Erosion bodies, among others.

Like the awareness raising activity, these partnerships also serve to embed the issue of INNS in more organisations, effectively 'spreading the burden' for INNS beyond the LAGs.

Risks to strategic co-ordination

The real issue however lies in the fact that if LAGs are unable to secure further funding, or to make themselves more self-sustaining through commercialising their work, then arguably the most important element of many LAGs' work under the Defra funding is unlikely to be picked up by any other organisations, unless they are persuaded to adopt a specific INNS focus supported by a dedicated resource. As noted in the outcomes section, in a number of places LAGs have joined up action on INNS across broad geographical areas which enable a strategic - rather than piecemeal and control-driven - approach.

Whilst other organisations may continue to monitor for INNS or to undertake control work in areas they are responsible for, the co-ordination role and overview that many LAGs have had over a whole catchment or county appears to be at risk. This is not to deny that getting other organisations to take up INNS work in the longer term is a success, and a sustainable way forwards, but it arguably runs the risk of a return to fragmented, piecemeal approach to INNS that LAGs claim existed previously, albeit with more actors. Given that a significant number of LAGs have spent a significant amount of time coordinating groups and instigating a top-down approach across a whole catchment, there is a real danger that if LAGs are unable to continue beyond the end of the Defra funding that this work may not be taken forward. Closely related to this is the importance of having a project coordinator to manage and drive forward the co-ordination and overview role. Without further funding it is unlikely that many LAGs will be able to support a dedicated INNS project coordinator.

In flagging these risks it needs to be acknowledged that the main source of evidence on likely future directions of local INNS work was provided by the LAGS themselves. The research team did not speak to other local or national stakeholders which would be useful in order to provide a counterbalancing perspective. It was also outside the scope of this review to assess the relative costs and benefits of different approaches to delivering INNS work at local level.

6 Discussion and conclusions

This chapter draws together the various strands of research presented previously, draws conclusions based on this evidence, and offers some recommendations for the future of LAGs.

Overall achievements of the LAGs funding

LAGs objectives and Defra's strategic objectives

With regard to LAGs funding objectives, Defra's assessment is that a large number of these were 'achieved' (102 of a total 259), and this in itself represents an overall success of the Defra funding. That said, a larger proportion are 'partially achieved/ongoing,' but given that the Defra funding is still ongoing for a large number of LAGs, this is to be expected. Only 18 objectives were 'not achieved,' and these were specific instances where LAGs failed to achieve their objectives for eradicating INNS, or where LAGs had not met a target number for training events.

In terms of how LAGs as a whole have contributed to Defra's strategic objectives, Chapter 3 outlined the activities that LAGs have undertaken with regards to each of the strategic objectives, and the outcomes apparent from these activities. In summary, the contribution that LAGs have made varies across each of the strategic objectives, being greater in some areas than others.

The greatest contribution is clearly with regard to mitigation, control and eradication of INNS; LAGs have not only had tangible impacts such as eradicating or severely reducing INNS from specific sites — with reductions of around 60%+ frequently reported — reducing the extent of INNS across larger areas and improving the overall knowledge of INNS coverage through surveying and mapping, but have also contributed in less tangible ways by using this improved knowledge to embark on a more strategic, systematic, catchment focused approach to eradicating INNS. LAGs have also contributed via what has been termed 'long term management.' LAGs have disseminated training to hundreds of individuals and organisations, increasing the stock of individuals able to recognise and control INNS in the future. LAGs have also catalysed some landowners to take responsibility for managing INNS on their own property. Finally, in some areas LAGs have contributed plans that will help to shape and guide the ongoing control of INNS in their areas. In terms of their own contribution to this ongoing work however, there are issues around future funding and LAGs' ability to resource ongoing monitoring and control.

With regards to prevention, early warning and rapid response, the overwhelming contributions that LAGs have made to these strategic objectives are in conducting awareness raising work and promoting the national campaigns *Check, Clean, Dry* and *Be Plant Wise*. LAGs have conducted awareness raising that has reached a wide audience¹⁰ – likely numbering tens of thousands – and importantly in many cases a targeted one. Although it is

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Defra's evidence base (http://www.sciencedirect.com/science/journal/09213449/79) on influencing behaviours highlights the important role that 'trusted messengers' can play in achieving reach and traction in communicating with the public. LAGs appear to be performing that role with respect to INNS in their local areas.

difficult to assess the impact of this work, the qualitative evidence is positive, and the amount of such work that has occurred represents an important outcome in itself – especially considering the fact that awareness raising is dealt with distinctly in the GB Strategy as well as in relation to prevention. In a more limited way LAGs have contributed to early warning and rapid response, primarily through a few examples of establishing systems for early warning or monitoring of high risk species not yet present in LAGs areas. That said, almost all of the LAGs have been involved in data sharing, and given the amount of surveying and mapping work undertaken then this arguably represents an important contribution to early warning and rapid response.

Supporting outcomes

A number of 'supporting outcomes' also contributed to the overall achievements of the LAGs funding, in enabling LAGs to meet specific local objectives, and to contribute to Defra's strategic objectives.

Local co-ordination of other INNS actors – individuals, groups and organisations – represents an important outcome of this funding, especially given that the situation that existed prior to the funding was – according to LAGs – generally piecemeal, isolated and fragmented. This is explored further below under 'Learning and good practice'.

A great deal of both awareness raising activity and training has been undertaken by LAGs, in part in line with their specific objectives, and as part of their wider strategic focus on raising the priority of INNS as an issue. These activities are reported to have successfully engaged a wide and varied audience. Awareness raising tended to be delivered to a wider, but targeted audience of local communities, groups, stakeholders, landowners, retailers, practitioners, students and high risk river users. Training tended to be delivered to a more focused group of individuals, groups or organisations with which LAGs worked directly, generally on surveying or control work, or who had a role in maintaining biosecurity.

Local engagement with landowners has overall proved successful, with LAGs establishing good relationships with the majority of landowners they have encountered, leading some landowners to take part in survey or control work, take responsibility for INNS on their own land, or in a minority of cases share the cost of tackling INNS. Despite this, in the small number of cases where landowner engagement was a challenge, it proved to be a significant barrier to LAGs, given their lack of legal recourse.

Almost all of the funded LAGs have shared data with local records centres, national databases, partners, Local Authorities and other agencies. Given the amount of surveying and mapping that LAGs have undertaken, this can only represent a significant contribution to the overall store of knowledge. Sharing of best practice was generally limited to informal conversations between LAGs, however the annual LAGs forum and online forum provide a more formal arena for LAGs to share best practice, and have led to at least one successful collaboration.

Additionality of the Defra funding

The extent to which the Defra funding allowed LAGs to do things that otherwise wouldn't have happened is varied. Firstly, for some LAGs the Defra funding represented their sole funding, whilst for others it was one part in a pool of funding (as shown in Annex 4). For the former, and given the extremely challenging funding environment many LAGs claimed to

find themselves in, it is reasonable to suggest that the majority of their work would not have happened without the Defra funding. For the latter, it is possible that work linked directly to the Defra funding objectives may not have happened, but harder to establish this in reality.

Given that LAGs generally suggested that the situation which existed in their areas prior to the Defra funding was one where some control work was happening, but in a piecemeal, fragmented and isolated fashion, it is reasonable to expect that this would have continued. Where LAGs have really added value to this situation (in many cases though not all) is in taking a more strategic approach to control, using extensive surveying to take a systematic, targeted approach to controlling INNS across a catchment, as well as coordinating those groups and agencies that were already working on INNS, and building partnerships around a long term plan for INNS management. As well as this, it has been suggested that awareness raising, training and landowner engagement were very limited prior to the Defra funding, so it seems that this is another area in which LAGs, using the Defra funding, have been able to achieve outcomes that would not have otherwise happened.

Drawing on what was outlined in section 3.4, LAGs have also provided added value in a number of other ways. One of the most important of these is in the mobilisation of resources that LAGs have achieved – resources that otherwise would in all probability not have been directed towards INNS. Much of this mobilisation has been achieved at little or no cost, for example by tapping into existing volunteer groups and networks, corporate volunteer days and gathering in kind contributions. Volunteer hours that likely run into the tens of thousands, awareness raising activities that likewise have reached individuals likely numbering tens of thousands, hundreds of new trainees, extensive surveying of large areas, and successful reductions in the extent of INNS are all things that LAGs have achieved with – certainly in some cases – relatively limited resources. Arguably, the relatively small cost of funding a project co-ordinator is justified in light of the resources that they are able to mobilise locally, and the benefit of having an individual whose role focuses purely on INNS.

By having a local presence, LAGs have also managed to quickly establish themselves as local trusted intermediaries for information, advice and action on INNS, and this local presence also allows LAGs to conduct extensive mapping and surveying, as well as to respond quickly to the discovery of new INNS problems. As well as this, and as highlighted in section 3.3, a number of LAGs have played an important role in providing co-ordination of local INNS activity, offering strategic direction and oversight that didn't exist, locally at least, previously.

Momentum for the future

With regard to what LAGs have managed to catalyse for the future, the picture is one of uncertainty. Almost all of the LAGs have the intention to continue or even to expand their work on INNS; however the issue of how this work will be funded and resourced looms large. There is evidence that in some cases LAGs have been successful in persuading landowners or other groups to take responsibility for INNS in their areas, but these are the exception rather than the rule. There is also qualitative evidence to suggest that LAGs have successfully raised the awareness of INNS amongst Local Authorities and other agencies, such that INNS is seen as more of a priority for these bodies. That said, there is very little evidence of Local Authorities or other agencies 'mainstreaming' LAGs work.

Limitations and gaps

A number of key gaps or weaknesses in LAGs work are evident from the research. These do not necessarily apply universally, and some represent insurmountable challenges rather than failings on the part of LAGs.

Large scale eradication of INNS

As was highlighted in Chapter 3, in general LAGs have not achieved large scale eradication of INNS in their target areas. This is primarily due to the challenges of both time and geographical scale; LAGs have worked within a relatively (as far as INNS are concerned) short timescale, and many in very large geographic areas. As well as these issues, some LAGs have discovered that the extent of INNS in their target areas is greater than they previously thought, and the task of eradication has proved to be much greater – and intrinsically longer term – than expected. That said, not eradicating INNS does not necessarily represent a failure. Many LAGs have achieved significant reductions in INNS in their areas, and have in place ongoing control plans that could reasonably be expected to achieve eradication in the longer term.

Landowner engagement

Although LAGs have generally had success in engaging with landowners, there are two important weaknesses in this element of their work. Firstly, where landowners have proved to be hostile to LAGs work, it has proved difficult, if not impossible for LAGs to overcome this challenge. This is arguably due to the lack of legislative recourse, but still suggests that this represents a limitation in LAGs work in this area. The second element is that, in general, LAGs have failed to elicit much in the way of financial contributions from landowners, which might contribute to the long term sustainability of LAGs. There are isolated examples of landowners contributing financially to LAGs work, but these are the exception.

Future sustainability

As Chapter 5 demonstrates, the overall picture with regard to the long term sustainability of LAGs is that many have failed to gain funding or to adopt a model that will allow them to continue their work after the Defra funding ends. Those who have gained funding have not necessarily done so specifically for INNS work, and may well have to adjust the focus of their work in line with the priorities of new funders. Whilst a number of LAGs have alluded to the extremely challenging funding environment in which they find themselves, given that a key aspiration of the Defra funding was that LAGs would become self sustaining, it can only be suggested that this represents an important failing for LAGs. Many of the LAGs that had explored funding options noted that dedicated funding for work on INNS was generally lacking even though there were many funds open to 'environmental' causes. This weakness is particularly acute when it is considered that several of the examples of good practice highlighted below — a strategic approach to control, and the co-ordination role — are essentially reliant on LAGs continuing in the longer term.

Learning and good practice

A number of key examples of learning and good practice have become evident during the course of the research. Whilst each of these is not necessarily applicable to all LAGs across the board, they represent learning or good practice for LAGs in different circumstances.

Strategic approach to control

One piece of good practice which is applicable to almost all LAGs (except perhaps those working on the very smallest scales, with limited funding) is to utilise extensive surveying and mapping of INNS to undertake a strategic, systematic and targeted approach to control. This involves two elements; identifying the upstream extent of INNS and working 'top-down' to control INNS across a catchment, and identifying INNS that are not yet widespread across a catchment for control before they become a bigger problem. As has been highlighted previously, whilst this approach may lead to slower progress in the short term — while mapping is undertaken and the extent of various INNS established — it is believed that in the longer term this approach is the one most likely to achieve eradication by preventing reseeding of sites downstream.

Co-ordination

Co-ordination is another important piece of good practice which is particularly relevant to those LAGs operating at a catchment scale. Coordinating existing activity on INNS across a catchment seems to represent a way of achieving a lot with a limited amount of resources, i.e. an INNS coordinator. By having a project or INNS coordinator who is able to bring together different strands of INNS work across a county – by local groups, councils, agencies etc – LAGs are able to add value to what is already happening and avoid duplication, as well as 'plugging gaps' where they exist. Having a catchment wide, strategic overview of INNS allows LAGs to avoid the situation many claim previously existed, where individual groups or agencies were working in an isolated, fragmented fashion, with no one taking responsibility for the 'big picture'.

Working with existing groups and volunteer networks

Many of the LAGs funded by Defra have had particular successes in engaging existing groups and volunteer networks in INNS work. LAGs have reported that existing groups provide a source of motivated and engaged volunteers, and that they are often easier to persuade of the value of INNS work than the general public. This is particularly true of those groups who are engaged in conservation work in a local area – such as 'friends of' groups or AONB volunteers – or those that have a particular stake in the health of aquatic and riparian habitats, such as anglers and other river users. In some instances, LAGs have found existing groups to be so open to the value of INNS work that they take responsibility entirely for said work in their areas, in a few instances even becoming self-sustaining.

Engaging with a broad range of stakeholders

Something that LAGs seem to have been successful at – as is evident from the audiences to which they have delivered awareness raising and training – is engaging with a broad range of stakeholders. LAGs have engaged with Local Authorities to the Environment Agency, and 'friends of' groups to sports clubs. This success may be partly due to LAGs' perceived independence from any 'official' bodies. Many of the LAGs saw engaging with as wide a variety of stakeholders as possible across their area as a crucial element of the co-ordination role described above.

Recommendations for the future

Based on the evidence put forward throughout this report, a number of recommendations are made below for what can be done to support LAGs to be more effective in future. These recommendations are split into two groups; recommendations for LAGs, and recommendations for Defra.

Recommendations for Defra

- Recognise the long term nature of INNS eradication it is clear that eradication of INNS on a larger scale is not something that will occur within the scale of traditional funding cycles. Recognising and accepting that LAGs will likely require ongoing support – financial or otherwise – from government in order to continue with the work they have begun is an important precursor to future decisions, and that the stop-start created by funding cycles may jeopardise the momentum LAGs have created
- 2. Support LAGs to be sustainable in the long term:
 - a. by giving funding advice and signposting to other areas which might offer funding that LAGs can draw on. Support LAGs to develop creative solutions for long term sustainability by giving or signposting to relevant guidance and expertise.
 - b. consider, along with strategic partners, how to fill the gap left by the end of the current Defra funding given that many LAGs are clearly not yet in a position to be self-sustaining, and that there is a risk of losing momentum and returning to the fragmented, piecemeal approach that existed previously.
- 3. Support LAGs to share best practice, and signpost external best practice, knowledge, and research and development particularly where this might present new ways for LAGs to control INNS, enable them to access sources of funding or develop models for becoming self-sustaining. Given the position of the GBNNSS as a central repository of information, this could be a role that they could play. Make events such as the annual forum as accessible to LAGs as possible, considering especially job and resource constraints of purely volunteer based LAGs.
- 4. Help LAGs to understand what measures and influencers they have at their disposal to engage reluctant landowners particularly in the light of new legislation, such as the Infrastructure Bill.
- 5. Acknowledge and reward the important niche that LAGs occupy in mobilising local resources to tackle control, even if mitigation is a lower priority than prevention and early warning in the overall GB strategy.
- 6. Encourage prevention and early detection actions by setting specific objectives in grant agreements while not all LAGs have reached the stage or size (in terms of learning, engagement or co-ordination) to be effective leaders of co-ordinated prevention and early detection activities, there are some that are. Continued funding to support further development of co-ordination and systematic approaches in these established and strategic-looking LAGs could help to secure the benefits of work begun through the current funding programme.
- 7. *If funding for LAGs continues:*
 - a. Consider break or revision points in grants for INNS work many LAGs noted they had come up against unexpected challenges, such as more extensive presence of INNS than they expected, or unforeseen need to

- employ equipment or contractor, but had little flexibility to shift elements of their Defra funding.
- b. Consider ways to estimate the impacts of awareness raising activities of LAGs for example, through national surveys if this activity is funded on a large enough scale to make a difference at that level, or by providing guidance and toolkits to LAGs to support self-evaluation and local indicators.
- c. Consider how LAGs could provide better and more systematic impact data within the limits of their resource constraints.
- d. Focus funding on project coordinators to allow them to continue to provide continuity around INNS, develop a strategic approach to INNS, continue to coordinate action on INNS across their area, and maintain a local presence and 'go to' focus for other individuals and organisations concerned with INNS.

Recommendations for LAGs

1. Work strategically wherever possible – LAGs should aim to work at a strategic level within their target area. This means being aware of, or finding out what work is already happening on INNS, both by statutory and regulatory bodies, as well as local communities and groups. By understanding as far as possible the current situation, LAGs can avoid duplicating the work of others, identify gaps that need filling, and add value to existing work. By having an overview of INNS in the area, LAGs can also instigate a programme of systematic, top-down control work.

2. Engage in local co-ordination:

- a. Work with and coordinate existing volunteer groups LAGs should tap into existing volunteer networks, in particular focusing on those working on environmental or conservation issues (such as 'Friends of' groups or environmental action groups), or with a vested interest in the health of aquatic and riparian habitats (such as anglers and other river users). LAGs should aim to coordinate work that these groups are already doing to ensure that groups fit into and are aware of the bigger, strategic programme of work.
- b. Engage with local leisure 'interest' groups that can provide 'eyes on the ground' building on examples such as Middlesbrough football club or Avon Invasive Weed Forum's targeting of dog owners. Use social media groups and networks where relevant in addition to traditional engagement events to extend reach.
- 3. Think about the future from the beginning LAGs should start to consider their options for long term sustainability immediately, and be creative in looking for models or sources of funding, such as other policy areas where funding might be found and how partners could contribute to, or take on, long term commitments.
- Consider revenue opportunities from control work, corporate volunteering and, potentially, use of communications materials – for example, where the LAG is helping a landowner to meet statutory obligations or delivering educational activities.

5. Consider best practice examples of using volunteer agreements — to support retention and volunteer satisfaction.

7 Annexes

Annex 1

% of LAGs objectives contributing to Defra's strategic objectives (reso	earcher qualita	ative analy	sis)	
			Long Term	Number of LAG
LAG	Prevention	Control	Management	objectives
Allen Valley Angling and Conservation	1	6	2	6
Avon Invasive weed Forum	4	13	4	17
Bollin Environmental Action and Conservation	2	10	6	13
Calder & Colne Rivers Trust	4	6	4	9
Cumbria Freshwater Invasive Non-native Species Initiative	2	6	0	6
Cheshire Region Invasive Species Initiative	2	7	2	7
Cornwall College	3	12	7	14
Cornwall Wildlife Trust (& Environmental Record Centre)	4	11	7	17
Dorset Wildlife Trust	3	8	4	11
Eastleigh Biodiversity Partnership	2	10	5	14
Essex Biodiversity Project	1	6	1	6
Froglife	0	1	1	2
Lee & Lincombe Residents Association	0	5	2	5
London invasive Species Initiative	2	12	6	14
Medway Swale Estuary Partnership	5	6	1	8
Medway Valley Countryside Partnership	3	8	4	11
Natural Enterprise	3	10	7	17
Norfolk non-native Species Initiative	4	18	3	19
Nottingham Biodiversity Action Group	0	3	2	3
Peak District and Lowland Derbyshire Non-native Species Initiative	1	8	1	8
Ribble Rivers Trust	1	5	2	5
South Yorkshire Biodiversity Research Group and Network	0	1	2	2
Staffordshire Wildlife Trust	1	4	0	4
Tale Valley Trust	2	4	0	4
Tees Rivers Trust	3	9	5	12
Tyne Catchment Local Action Group	1	4	3	4
Wey Valley Landscape Partnership	0	4	1	4
Wildlife Trust for Bedfordshire, Cambridgeshire & Northamptonshire	0	9	4	9
Wiltshire Wildlife Trust	1	4	1	5
Total	55	210	87	256
Percentage	21%	82%	34%	

Annex 2

	Volunteer Hours (From Defra reports)		ports)		
LAG	Apr- 12	Oct- 12	Apr- 13	Oct- 13	Apr- 14
Allen Valley Angling and Conservation			456	325	360
Avon Invasive Weed Forum			280	900	100
Bollin Environmental Action and Conservation			1309		3600
Calder & Colne Rivers Trust				350	924
Cumbria Freshwater Invasive Non-native Species Initiative	4383		7221		6827
Cheshire Region Invasive Species Initiative			6500		
Cornwall College	1986		3116	2677	3487
Cornwall Wildlife Trust			2168	847	911
Dorset Wildlife Trust			1666	644	644
Eastleigh Biodiversity Partnership		529	912	864	887
Essex Biodiversity Project			242	658	
Froglife			36		
Lee & Lincombe Residents Association			72	44	59
London invasive Species Initiative			10	15	50
Medway Swale Estuary Partnership			480		
Medway Valley Countryside Partnership		100	291	194	254
Natural Enterprise			140	1409	
Norfolk non-native Species Initiative			180	730	730
Nottingham Biodiversity Action Group		600	600		
Peak District and Lowland Derbyshire Non-native Species Initiative					
Ribble Rivers Trust			233	529	557
South Yorkshire Biodiversity Research Group and Network					
Staffordshire Wildlife Trust					
Tale Valley Trust			336	209	209
Tees Rivers Trust					10568
Tyne Catchment Local Action Group					
Wey Valley Landscape Partnership					
Wildlife Trust for Bedfordshire, Cambridgeshire & Northamptonshire		434	1310	452	562
Wiltshire Wildlife Trust					
Period total	6369	1663	27558	10844	30726
Total					77159

Nb. These numbers are as reported by the LAGs and have not been independently verified. Consequently the totals in particular should be treated as neither robust nor reliable.

Annex 3

Long term Sustainability Actions	Long term Sustainability Actions				
	Actions/plans for the future				
Allen Valley Angling and Conservation	 Currently no major drive to formally secure further funding as it may not be necessary, funding needs are small — Work will be more low-key and big, coordinated volunteer days are unlikely to continue due to lack of finance —not necessarily seen as a problem given that there is less active control work to do at this stage. Himalayan Balsam monitoring and control work will continue as club members, locals and volunteers are now in a 'mind-set' to carry out the work voluntarily Open to exploring larger funding opportunities if for example, another round of LAG funding was available. But otherwise, they will continue to approach a range of local organisations for support/small-scale funding, whilst engaging with the Area of Natural Beauty (AONB) partnership which covers the Allen Valley, working with their volunteers and exploring collaboration prospects. 				
Avon Invasive weed Forum	 Exploring options for future funding, with some already secured – Funds secured to keep the project going until August 2015 at least- with Burgess Salmon being a 'key driver' which may end up fully supporting the LAG. £13,600 secured from SITA £3,500 secured from Burgess Salmon solicitors £8,000 secured from Bristol City Council £3,500 pending from CEMEX Bristol Zoo bid writer and AIWF project coordinator collaborating on funding applications. Strategic Planning – AIWF Steering Group planning looking to ensure project stays robust post Defra funding Working with other local groups to develop plans for Community work post 2015 e.g. Leap Valley Local Conservation Group (River Frome) for management of Himalayan Balsam & future control post Defra funding 				
Bollin Environmental Action and Conservation	 Exploring options for future funding, with some already secured – Bollin have successfully received a grant from the Ernest Cook Trust for awareness raising/control work with school children in the local area. They have also secured funds from United Utilities to continue surveying for INNS. A broader fundraising plan has been made with multiple applications outstanding – e.g. Esmeé Fairbairn foundation for approximately £90k Strategic planning - Set up various sub-groups: Futures & Operations; Funding; Engagement. 				
Calder & Colne Rivers Trust	 Exploring options for future funding – Looking to pursue a 'partnership approach' to funding, with plans to work with Yorkshire Water being just one such example. Also actively pursuing EA funding opportunities. 				

Cumbria Freshwater Invasive Non- native Species Initiative	 Exploring options for future funding – Primarily targeted local sources including County & Local Councils and wind turbine companies. They are focused on securing funding for the co-ordinator roles at Rivers Trusts in the catchment, as well as obtaining smaller-scale local funding for control work on specific sites. Funding in the longer term continues to be difficult to secure. With individual bio-security plans, training materials and sessions continuing to be delivered free of charge despite funding being difficult and high demand- including from national and commercial organisations – a major opportunity exists to commercialise CFINNS' work. There is interest in pursuing this but a lack of support or business experience is holding back the possibility of this being viable. Widely acknowledged need for training programme to continue and be expanded but no indication if funding will allow for this in coming months/years.
Cheshire Region Invasive Species Initiative	• Project unlikely to continue in current form – No progress on securing funding and support to ensure that the project can continue. Instead will look to work with the recently conceived River Dee INNS project (funded by Welsh Govt, EA, NE etc.), though this covers a more confined area than the original Cheshire project.
Cornwall College	 Exploring options for future funding – There are currently several applications being pursued to pick up aspects of the Defra-funded LAG work. Within these applications the INNS project objectives have been tweaked to meet specific funder priorities and requirements. Small amounts of funding have already been raised for aspects of their work- e.g. for production/nationwide distribution of educational materials (from NNSS, SCRT) with info packs sold to SEPA & EA; Funding received from AHVLA for alpine newts research; Royal Society Partnership Grant for project with Fowey Community College. They also received a small amount for their collaboration with CFINNS - on INNS education packs.
Cornwall Wildlife Trust and the Environmental Records Centre of Cornwall and the Isles of Scilly	• Exploring options for future funding - current sources of money aren't sufficient to keep the LAG going beyond March 2015 so they are currently looking for more funding
Dorset Wildlife Trust	 Exploring options for future funding – At the time of writing unsure on future funding prospects; had a meeting of the LAG Steering Group on 1st December to explore options. LAG has not yet applied for funding, but INNS work will be part of ongoing basin/catchment based approach undertaken by independent members of the LAG Will work with FWAG (Farming & Wildlife Advisory Group) and CABA (Catchment Based Approach) to look at funding and sustainability prospects, as well as Rivers Trusts, angling groups etc. If there is no more funding: The Wildlife Trust will use other programmes to ensure non-native species continue to get attention. Landowner liaison and awareness-raising will continue due 'to the time and effort already invested'. Awareness-raising will continue with workshops – invasive species will be included but no longer would be the sole focus. Funding will come through the Water Framework Directive. 'Wildlife Champions' will be appointed with funding from the Heritage Lottery Fund – may work on invasive species.

Eastleigh Biodiversity Partnership	 Future INNS work uncertain - There will be some self-sustaining groups that will continue to carry out control work (e.g. Friends of Hocombe Mead) but in general sourcing the funding needed for a project coordinator is proving difficult. Project Officer soon to be asked to focus on other work by the council but despite this there is a feeling that 'somehow' the council will continue to tackle INNS in the catchment Will be encouraging partners to tackle INNS where they occur and there are plans to support a student working in the neighbouring Hamble Estuary to start mapping INNS.
Essex Biodiversity Project	 Project currently inactive due to funding gaps - Defra funding ended in 2013, though INNS work has continued since and will carry on in limited form, essentially only when staff are available to give time to pulling Balsam on an ad-hoc basis. Acknowledge that more funding is required if the INNS work is to be sustainable in the longer term, but they have generally found funding opportunities to be extremely limited. They would like to secure funding through trialling bio-control methods on Himalayan Balsam but no progress has been made on this Will work with other stakeholders via the catchment based approach to help secure sustainability of the INNS work
Lee & Lincombe Residents Association	 Funding secured - estimated costs for project £290/year "to be raised from contributions by landowners, two fund-raising events, and our current small financial resources" No further sources of funding are being sought as the money needed is not excessive and this need can be met locally
London invasive Species Initiative	 Exploring options for future funding – Have (at least) 1 grant application waiting for a response, and are in the process of analysing alternative potential funding sources. The group is also keen to pursue a more commercial model – Looking to possibly develop LISI in a similar way to GIGL (i.e. a Community Investment Company); the initiative has things to sell to partners and can add value to GIGL's work
Medway Swale Estuary Partnership	• Exploring options for future funding – Have applied for Heritage Lottery funding for their work on Carpet Sea Squirt. At the time of writing, meetings had been scheduled to discuss future prospects and long-term planning.
Medway Valley Countryside Partnership	 Exploring options for future funding – At the time of writing, staff have 'met with other project partners to discuss exit strategies and planning for 2014 season'. They will be applying to be part of the Himalayan Balsam biological control pilot and will continue to look at funding available through the Environment Agency, Natural England and local government – among other sources. Raised concerns over long-term sustainability however, particularly given that much of the funding they are applying for is only awarded on an annual basis.

Natural Enterprise	 Exploring options for future funding – Have made an application to the Esmeé Fairbairn Foundation and are exploring the possibility of securing funding via the EA and/or the EU. Developing 'Plant Positive' as a project within local Landscape Partnership - hoping to successfully secure a main grant in Summer 2015 A 5 year Heritage Lottery Fund 'landscape partnership' project likely to be confirmed next year may solve 90% of the Himalayan Balsam problem in area Strategic planning - Efforts to link with Countryside and Animal Management courses at IoW college to 'encourage a regular volunteer effort beyond the end of the project'
Norfolk non-native Species Initiative	 Exploring options for future funding, with some already secured – Currently have a 'mosaic of funding' which they will look to develop; recently secured funding for prevention/bio-security work from the EU. Acknowledgement that funding for ongoing control work will be difficult to secure, with ongoing monitoring likely to be reliant on volunteers. Emphasises importance of being able to write convincing and professional funding applications as a key skill in terms of bringing about sustainability. Explains that it is vital to be realistic about the costs of projects, and be business like more generally. Acknowledges that it is easier for LAGs that are council hosted (like Norfolk) to secure funding and access to wider support than those hosted by wildlife trusts or that stand alone.
Nottingham Biodiversity Action Group	• Exploring options for future funding and partnerships – Looking to ensure INNS work continues as part of broader local biodiversity partnership; are also currently receiving some funding and support from partner organisations.
Ribble Rivers Trust	 Exploring options for future funding - Applying to the Big Lottery Fund to roll out their LAG model across the county; they are not confident that other funding sources will be available if this bid is unsuccessful. Strategic planning - Forming partnerships with pre-established groups and local charities to recruit volunteers, and with National Trust to store equipment. Looking to work with Wyre and Loon Rivers Trusts, there will be individual Project Officers for these and also an overall steering group
Staffordshire Wildlife Trust	• Exploring options for future funding – Looking to source funding from the AONB trust, Chapel trusts etc., whilst developing partnerships with organisations in the local area to ensure that the control/monitoring work can continue.
Tale Valley Trust	Funding secured
Tees Rivers Trust	 Exploring options for future funding – Big Lottery Funding secured (as part of Tees Rediscovered bid) for the next 5 years for a third of the area that the trust does INNS work in. Are In the process of trying to secure funds for the rest of the catchment- another bid has been made to the Lottery as part of the Tees Catchment Partnership. Small-scale volunteer groups feel they can gain elements of funding through community pots, whilst elements of commercialisation – approaching landowners and suggesting that they make a donation for work done on their land – are being explored.

Local Action Groups for Invasive Non-Native Species | A report for Defra

Tyne Catchment Local Action Group	 INNS-specific project inactive – Built in INNS work into other projects e.g. maintaining grasslands and the water vole project Natural England now a key source of funding.
Wey Valley Landscape Partnership	• Exploring options for future funding and partnerships – LAG is looking to work with the local Countryside Partnerships (CPs) to ensure that the INNS work can continue. Pursuing funding directly through the CPs and Surrey Wildlife Trust.
Wildlife Trust for Bedfordshire, Cambridgeshire & Northamptonshire	• Exploring options for future funding – No significant progress made thus far though the Wildlife Trust have committed to supporting the LAG continuing.
Wiltshire Wildlife Trust	Exploring options for future funding

Annex 4

		£ Financial Contributions (From Defra reports)			£ In-Kind Contributions (From Defra reports)		
LAG	Apr-13	Oct-13	Apr-14	Apr-13	Oct-13	Apr-14	
Allen Valley Angling and Conservation	1100	200	200	2025	2000	2000	
Avon Invasive Weed Forum	265		17000	4648			
Bollin Environmental Action and Conservation			500	22140		3600	
Calder & Colne Rivers Trust		8000	8000				
Cumbria Freshwater Invasive Non-native Species Initiative							
Cheshire Region Invasive Species Initiative	4800			5800			
Cornwall College	15980	10499	16105	6153	5235	6450	
Cornwall Wildlife Trust	5026		25711	15916	5925	7050	
Dorset Wildlife Trust	20315	5000	5000	3182	2325	1950	
Eastleigh Biodiversity Partnership	8535	1347	7194			135	
Essex Biodiversity Project	1142	2615		1294	2515		
Froglife				103			
Lee & Lincombe Residents Association					301	402	
London invasive Species Initiative		300	300	16575	6550	26625	
Medway Swale	3000			2000			
Medway Valley Countryside Partnership	47950	39820	76386	1000	1000	1500	
Natural Enterprise	1000			900			
Norfolk non-native Species Initiative	13000	7000	30000	15920		10000	
Nottingham Biodiversity Action Group	9310						
Peak District and Lowland Derbyshire Non-native Species Initiative							
Ribble Rivers Trust		3036	3036	472	7261	8381	
South Yorkshire Biodiversity Research Group and Network							
Staffordshire Wildlife Trust							
Tale Valley Trust	450	936	936	2352	2352	2352	
Tees Rivers Trust	58000	1702	6524	8800	31405	73953	
Tyne Catchment Local Action Group							
Wey Valley Landscape Partnership							
Wildlife Trust for Bedfordshire, Cambridgeshire & Northamptonshire				13900	4250	5750	
Wiltshire Wildlife Trust							
Period tota	l 189874	80455	196892	123180	71119	150148	
Tota	I		467221			344447	

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