Historic England

HER Backlog 2022

Summary

Purpose

This report synthesizes the findings of the HER Backlog Research project which looked at the extent of un-accessioned materials in the 83 Historic Environment Records (HERs) in England. The report is based on a series of interviews conducted with HERs and stakeholders and a digital survey that ran from December 3rd to January 28th, 2022 and was circulated via the HER forum.

Limitations

The survey had a good response: 65 HERs fully completed the survey and 10 completed a shortened version focusing on definitions. This means that 90% of HERs engaged with the proposed definitions. However, the views of 8 HERs are not included. Furthermore, some HERs had limited ability to confidently quantify their backlog so this report is not a complete picture of the current scale of HER backlogs.

Results

91% of HERs surveyed have a backlog of un-accessioned sources. The primary cause is the chronic under-resourcing of HERs; with current staffing levels 49% report that their backlog will increase every year. According to HERs, the highest priority resources for accessioning are grey literature, local research and built heritage information generated through the planning system. These are all in the top 6 categories of backlog in terms of reported quantities. Currently, it would take one person approximately 211 years to address the backlog.

Recommendations

Strategies for monitoring backlogs that have worked for HERs are conducting audits and forward action plans. Continuing to support HERs to join the audit programme is a key recommendation of the report, alongside regular monitoring of backlogs via the Annual Survey. A programme to fund backlog work would be the most effective solution to the current backlog starting with grey literature and local research; HER staff cannot be expected to do all of this work and additional staff are required. The timeline of any remediation should consider the projected annual growth of backlogs.

Front cover:

Filing cabinets.

This document has been prepared by Helen Thomas.

Please refer to this document as:

Historic England 2022 *HER Backlog 2022*. Policy & Evidence. Historic England.

Contents

Figures

Tables

1 Introduction

This report on HER backlogs is the culmination of a 5-month research project; the purpose was to further the development of a national standardised approach to prioritising and addressing these backlogs.

This research is part of the Heritage Information Access Strategy (HIAS) which recognises Local Authority HERs as the first point of call for and primary trusted source of investigative research data and knowledge. 91% of HERs surveyed report backlogs of un-accessioned sources, a situation that gives rise to detrimental inconsistencies between HERs and gaps within the record itself.

Participation in the HER audit programme allows the HER to calculate backlog size and scope and to estimate clearance times. However, each HER is working to its own local imperatives and understanding of backlog, and estimates will vary widely. The 2021 Annual Survey included questions on HER backlog which provided a useful background for this project and highlighted the need for targeted research. Before this project, there was no agreed definition of high priority HER backlog.

The project objectives were:

- Determine current scale and scope of HER backlog
- Create and refine standardised categories and terminology for different types of backlog, particularly the difference between backlog and record enhancement
- Define high priority HER backlog in line with national policy and guidance
- Calculate resources required to clear backlog
- Identify strategies to address backlog and pre-empt further backlog creation

Abbreviations

ADS	Archaeology Data Service
ALGAO	Association of Local Government Archaeological Officers
CIfA	Chartered Institute for Archaeologists
DBAs	Desk-based Assessments
HE	Historic England
HER	Historic Environment Record
HIAS	Heritage Information Access Strategy
HIPs	Heritage Information Partnerships Team
Lidar	Light Detection and Ranging
NRHE	National Record of the Historic Environment
PAS	Portable Antiquities Scheme

Definitions

HER Audit Programme

Led by Historic England (HE), the Audit Programme assesses the HER against nationally agreed criteria relating to key Service Outcomes to provide a picture of the HERs service and data-holding together with an action plan for the HER's continuous improvement.

OASIS

OASIS is a national system that enables heritage practitioners to provide information about their investigations to HE and HERs. Associated reports are then released into the Library of the Archaeology Data Service (ADS) for long-term preservation and access.

Acknowledgements

Thank you to the steering committee who oversaw this research, those that agreed to be interviewed as part of the project, and all the HERs who completed the survey.

2 The Survey

A total of 75 of 83 HERs responded to the survey. 65 completed the survey in full, with an additional 10 providing partial responses.

In each section HERs were asked to:

1. Feedback on proposed definitions of backlog and record enhancement; and state whether they had backlog or enhancement projects
2. Decide for each category of resource whether it was considered primarily backlog or record enhancement by the HER
3. Provide a quantification of their backlog
4. Consider what is high priority backlog and what determines these priorities
5. Record how the HER accessioned grey literature
6. State annual change in backlog size
7. List external resources required for backlog clearance
8. Provide current staffing levels
9. Discuss use of volunteers and accessioning difficulty
10. List strategies in use for addressing backlog

2.1 Definitions

Backlog Definition

This was the definition of backlog proposed in the survey:

> an accumulation of sources of information waiting to be assimilated into the HER database, where the main task would be the creation of new records (Monuments, Events or Sources) or the addition of data to skeleton records*
>
> *A 'skeleton' record comprised of limited details is often created to flag the existence of information in lieu of a complete HER record. Information waiting to be added to these records is also considered backlog.

81% of HERs surveyed agreed with this definition (74% of HERs overall). For those that disagreed, the main criticism was the addition of skeletal records to the definition. This was included to recognise that many HERs use skeleton records as a tool to manage backlog, and remaining data awaiting accessioning to these records is considered high priority backlog by HE. This adjunct to the backlog definition may be phased out as backlog research continues. This is the working definition of backlog that this report will use.

Record Enhancement Definition

This was the definition of record enhancement proposed in the survey:

> Individual record enhancement is when a record already exists, but more information is available to be added, or linked, or existing information needs correcting and clarifying. While this may result in a few new records, primarily this information would improve the quality and content of existing records.

95% of surveyed HERs agreed with this definition (86% of all HERs). Feedback here was that the definition is so broad as to include many aspects of everyday HER work, including both the enhancement of individual records and overall record enhancement projects. This is the definition of record enhancement used in this report.

Backlog

Based on these two definitions, 68 of the 75 HERs surveyed (91%) report having backlogs and record enhancement projects. Not all of the 68 HERs with backlogs, also have record enhancement projects and vice versa. HERs with backlogs are spread relatively equally across the country, with slightly higher numbers in the North-East, Yorkshire, Midlands and South-West. Against other indicators (software, service provision, total records, geographic size) there is an equal distribution of backlogs with no single factor contributing to a likelihood of having a backlog or not.

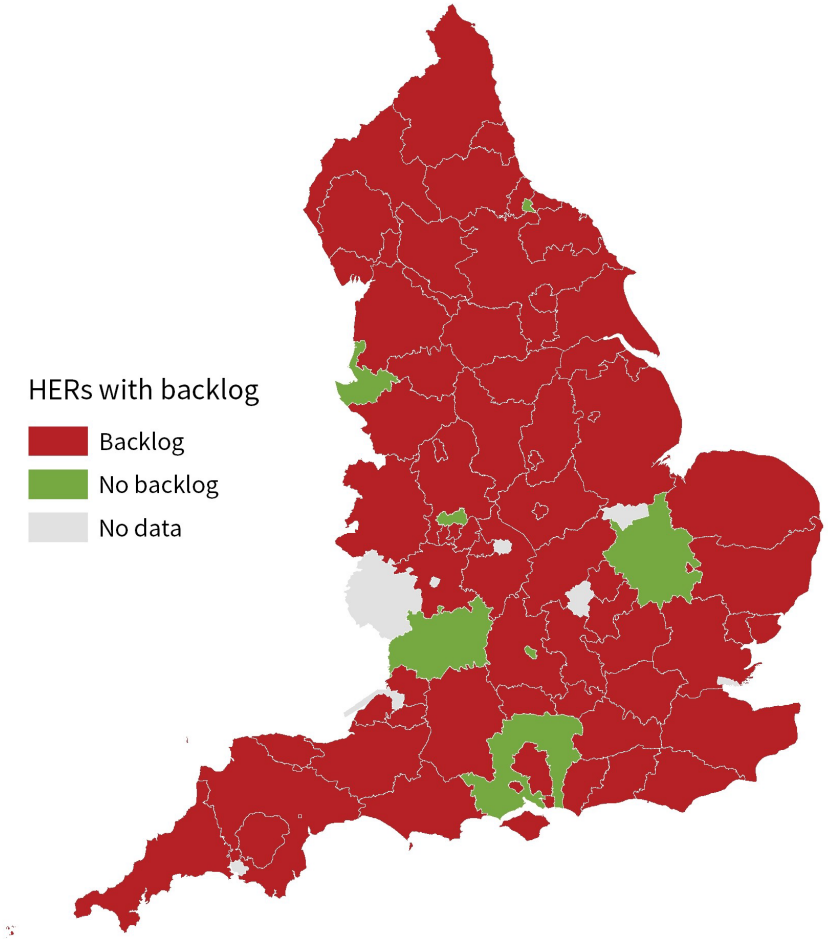

Figure 1: Map of HERs with backlogs (shown in red) in England

2.2 Backlog or Enhancement

HERs were asked to choose for each of the 18 resource categories whether this material was considered predominantly backlog or record enhancement or neither. While some lamented that there was not a 'both' option, this was deliberate. Many of these categories can be both backlog and enhancement according to the proposed definitions, but it is useful to know what is primarily backlog, and what is primarily enhancement. However, there was very little consensus.

Only two categories were considered 'backlog' by more than 70% of HERs surveyed:

- Grey literature — 93% agree
- Local research (e.g. projects, reports, survey results, databases, textual documentation) — 72% agree

7 categories were considered by more HERs to be enhancement than backlog, but none with more than 58% agreement.

74 of the 83 HERs responded to this question making it an accurate depiction of the varied approach to backlog and enhancement. What this means for how backlog is defined is discussed further in section 3.1.

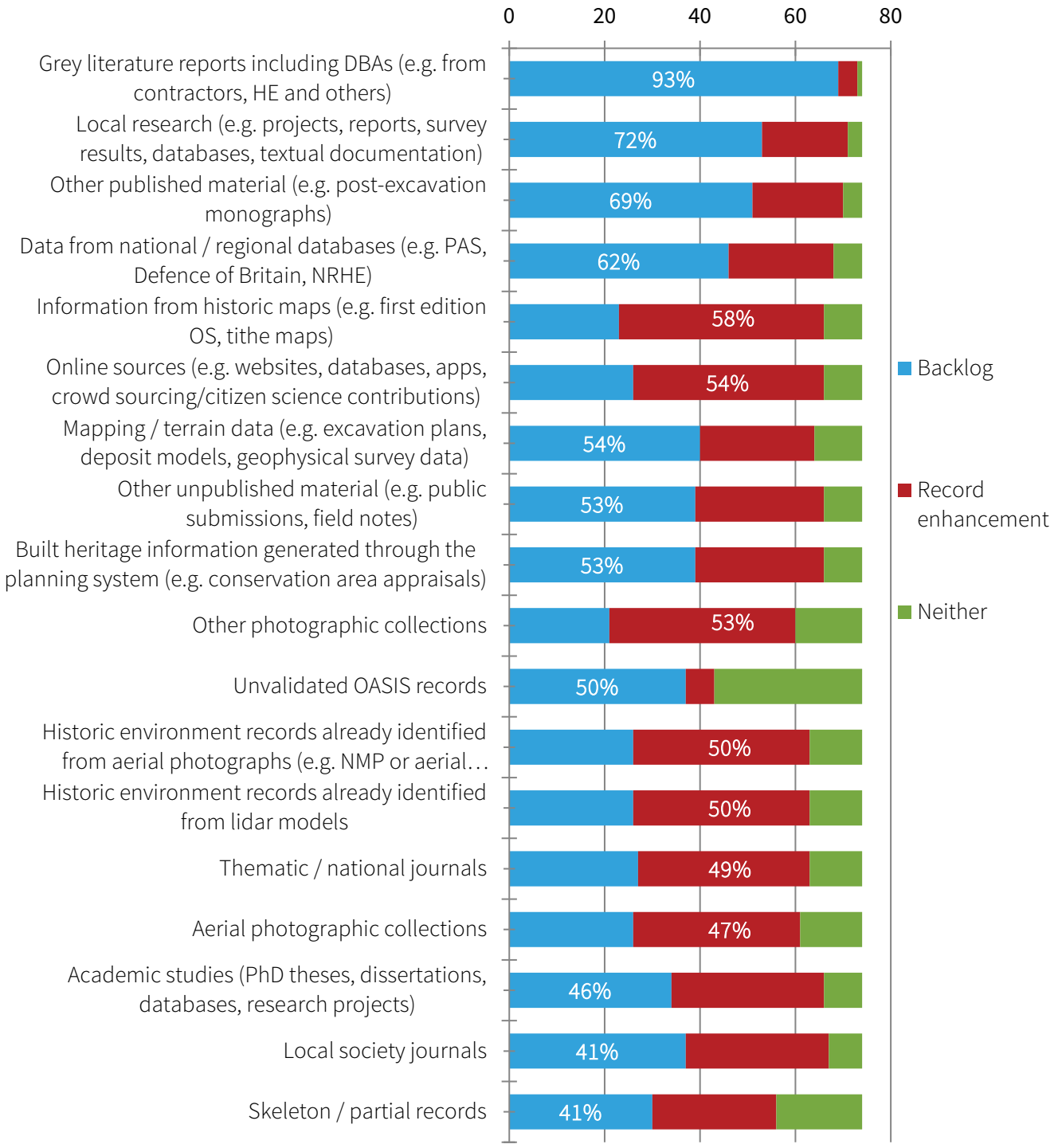

Figure 2: Resource categories considered primarily backlog or enhancement

2.3 The Extent of HER Backlogs

As part of the survey, HERs were asked to quantify their backlog for all 19 categories. This was subdivided into:

- A brief description
- Format (physical or digital)
- Unit in which they quantified their backlog (for example, individual photographs versus archival storage boxes or journal articles versus journal issues)
- Quantity
- Time (in hours) it would take to accession each unit of backlog

The accuracy of this information varied. For HERs who had done a recent audit this was a relatively straightforward exercise, but for many it was difficult to calculate backlog size without a time-intensive scoping exercise. This survey was also conducted during work-from-home guidance and some HERs were not able to provide quantities for physical backlogs in the office. A few HERs only had the capacity to indicate whether they had the category of backlog or not. Many thanks to all HERs who attempted the quantification exercise.

The backlog figures do not include all HER backlog: 8 HERs did not complete the survey and others were not able to provide quantities. In Table 1 the middle column shows the percentage of HERs with quantified backlogs for each category. 60% of HERs have quantified their whole backlog (except for the category of thematic and national journals where only 43% of HERs provided quantified figures). For some categories — other, skeleton records, grey literature — over 70% of HERs were able to provide quantified figures. The right-hand column delineates the overall percentage of HERs who responded but were unable to give numbers. Approximately 80% of HERs know what their backlog consists of, and over 60% can provide quantities for the composite parts.

Overall there is a high level of feedback on the presence of certain resources in HER backlogs (over 75% of the total HER community), however accurate quantities are still elusive for 25 to 35% of HERs. This missing part of the picture must be kept in mind when reviewing the current scale of the HER backlog.

Table 1: Quantified and overall response rates

Category	% HERs with quantified backlogs in total HER population	% HERs the project has data on in total HER population
Other	78	84
Skeleton records	72	83
Grey Literature	71	82
Other photographic collections	69	82
Aerial Photography	67	81
Local Research	67	80
Other unpublished materials	66	76
Local Society Journals	65	78

Other published material	65	75
Built Heritage information	64	81
Unvalidated OASIS records	64	77
Mapping and Terrain Data	64	78
Academic Studies	63	77
Online Sources	63	71
Data from National / Regional Databases	60	81
Thematic / National Journals	47	67
HER records already identified from Lidar[1]		83
HER records already identified from Aerial Photography[1]		83
Information from Historic Maps[1]		83

[1] HERs were not asked to quantify these categories

Backlog Quantities

The top three most common backlog categories are:

1. Grey Literature (57 HERs)
2. Local Research (50 HERs)
3. Local Society Journals (48 HERs)

Mapping and terrain data, HER records already identified from lidar and aerial photography, and online sources are the least common categories of backlog.

Table 2: Backlog quantities

Category	HERs with this backlog	HERs without this backlog	Total HERs represented in this data	Time to accession material (years)
Grey Literature	57	11	68	34
Local Research	50	16	66	18
Local Society Journals	48	17	65	8
Academic Studies	42	22	64	2
Data from National / Regional Databases[1]	41	26	67	16
Built Heritage Information	40	27	67	30
Unvalidated OASIS records[2]	37	27	64	8
Other photographic collections	36	32	68	16
Historic Maps	36	33	69	N/A

Aerial Photography	33	34	67	19
Other unpublished materials	33	30	63	18
Other published material	32	30	62	16
Skeleton records	30	39	69	9
Thematic / National Journals	29	27	56	0.5
Mapping and Terrain Data	27	38	65	9
Online Sources	26	33	59	2
HER records already identified from aerial photography	26	43	69	N/A
HER records already identified from LiDAR	16	53	69	N/A
Other	13	57	70	1

[1] This does not include data from the NRHE to HER transfer
[2] Will be addressed by OASIS V

In terms of the estimated hours it would take to address these backlogs, the most time-consuming category is grey literature, followed by built heritage information, other photography, aerial photography and local research. Unsurprisingly, this order of materials is very similar to the quantified response rate (Table 1), clearly the categories with the highest level of quantification will be overly represented in terms of staff hours required.

Certain categories are going to be easier to quantify: HERs have been asked to quantify their backlogs of grey literature before, and since it is often the highest priority for HERs many have their own systems for recording grey literature backlogs (again explaining the higher response rate). Physical collections stored in the HER, such as aerial photographs, are easier to quantify than unpublished academic studies that could require research by the HER officer to discover.

There are limitations with any quantification of HER backlogs. The above tables represent known and partially known resources but there are also known unknowns, such as national journals which may be behind paywalls, and total unknowns. This, combined with the approximate 30% of HER backlogs which are not quantified, must not be overlooked. Until there is a higher quantified response rate, time-intensive categories should not be used to determine priorities but rather as a base for calculating approximate staff time required to accession materials (see 3.3). Currently, the backlog would take 211 years to address.

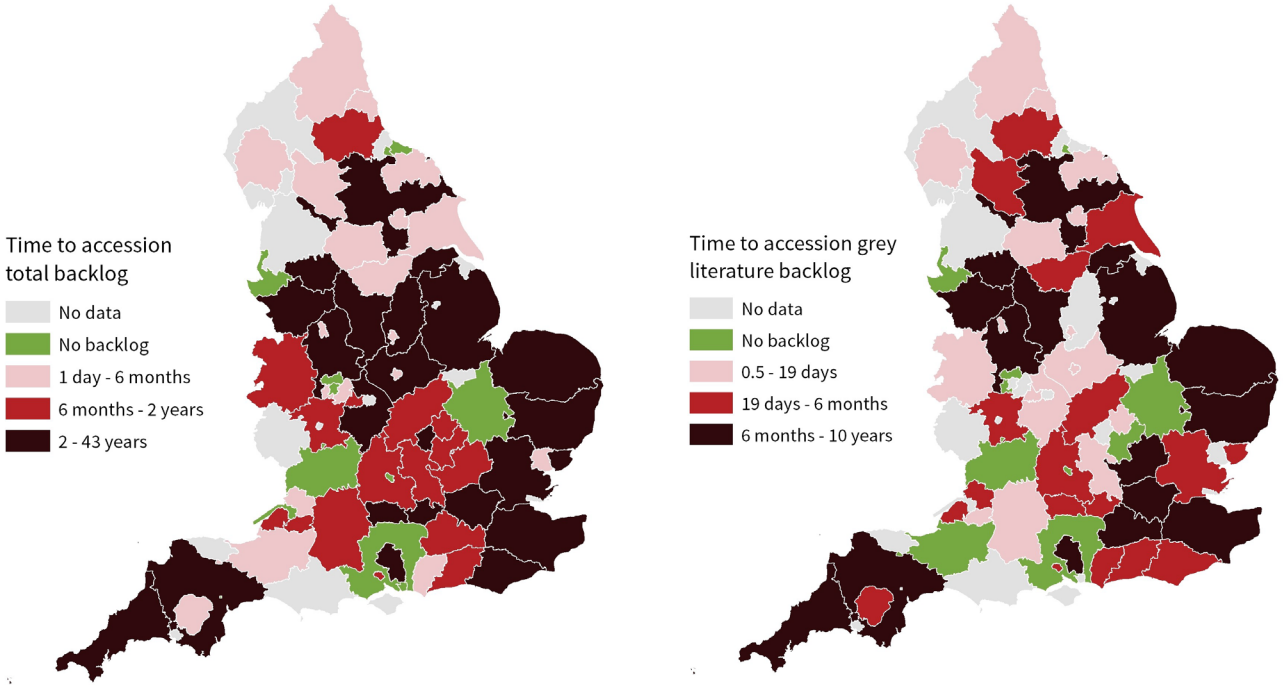

Figure 3: Maps showing time it would take to accession total backlog (left); and grey literature backlog (right).

2.4 Priorities

HERs were asked to rank the top 5 categories of backlog in terms of priority for accessioning from highest to lowest. Table 3 shows the rank of categories by prioritisation. Again, grey literature and local research are the top two categories, followed by built heritage information generated through the planning system. From conversations with HERs, more are experiencing requests for built heritage data which often is not as well represented in the HER — local listing projects can help to remedy this, but the high prioritisation of built heritage information reflects the awareness that this needs focussed attention.

HERs' backlog priorities will partially depend on what has been historically accessioned and so may change over a long period of time, especially if ongoing backlog or enhancement projects are in place. However, the 2021 Annual Survey also asked for backlog prioritisation. Although the categories were not the same — for example, built heritage was not an option — both grey literature and local research were in the top 3 categories alongside local journals (now 4th) which shows a continuity of what has been, and still is, high priority backlog.

Table 3: Priorities for accessioning backlog

Rank (priority)	Category	% agree backlog[1]	% agree record enhancement
1	Grey literature reports including DBAs (e.g. from contractors, HE and others)	93	5
2	Local research (e.g. projects, reports, survey results, databases, textual documentation)	72	24
3	Built heritage information generated through the planning system (e.g. conservation area appraisals)	53	36
4	Local society journals	50	41
5	Skeleton / partial records	41	35
6	Other published material (e.g. post-excavation monographs)	69	26
7	Data from national / regional databases (e.g. PAS, Defence of Britain, NRHE)	62	30
8	Unvalidated OASIS records	50	8
9	Academic studies (PhD theses, dissertations, databases, research projects)	46	43
10	Historic environment records already identified from aerial photographs (e.g. NMP or aerial reconnaissance)	35	50
11	Other unpublished material (e.g. public submissions, field notes)	53	36
12	Information from historic maps (e.g. first edition OS, tithe maps)	31	58
13	Thematic / national journals	36	49
14	Mapping / terrain data (e.g. excavation plans, deposit models, geophysical survey data)	54	32
15	Historic environment records already identified from lidar models	35	50
16	Other photographic collections	28	53
17	Online sources (e.g. websites, databases, apps, crowd sourcing/citizen science contributions)	35	54
18	Aerial photographic collections	35	47

[1] Percentages do not total 100 since 'neither' was also an option for this question

The top factor that determines priority was local planning objectives (for example, areas marked for development). 40 HERs said this was 'very important' or 'important' for determining accessioning priority. Other important factors were the ease of access to the information and how often the material was requested by HER users. Factors that had the least effect on priority were how much space the material takes up in the HER and the least time-consuming accessioning tasks. However, all factors were important or very important for some HERs which demonstrates that determining priorities is a complex and changing picture.

Figure 4: Factors for accessioning priority

2.5 Accessioning Grey Literature

One of the issues with developing a national overview of the extent of HER backlogs is that accessioning practices are different across HERs. This section of the survey was designed to see how many HERs routinely accession monument and event data from grey literature, including desk-based assessments (DBAs).

All but 1 HER reported that they always add events when accessioning grey literature, all but 2 reported that they do the same for monuments. 13 of the 72 HERs, however, said that they do not accession DBAs. Many HERs commented that they only add DBAs when they contain new information, this is logical since DBAs can be reiterations of HER data.

Nationally there is a standard approach to accessioning grey literature; this is encouraging since the consistent accessioning practice of monument and event data means that the grey literature backlog will be addressed similarly by HERs. Grey literature is considered high priority backlog, and one of the recommendations of this report is to include the expectation that all HERs accession DBAs containing new information in accessioning guidance.

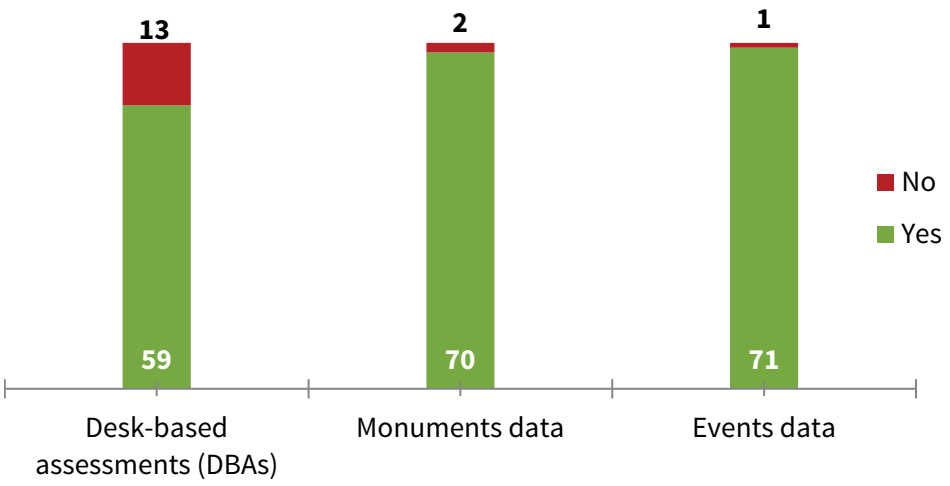

Figure 5: Accessioning practices for grey literature

2.6 Backlog Growth

Only 15% of HERs report being able to accession all newly deposited material into the HER. For 23% some material is always added to the backlog, and 22% report that all new data is added to the backlog. Some HERs, often smaller ones, do not receive regular deposits of material (22%).

When asked if backlogs are decreasing or increasing annually, 32 HERs reported that they are increasing (49%), while 20 reported that they neither increase nor decrease (31%), and 13 reported that the backlog was decreasing (20%). The 49% of HERs that reported backlog growth, especially those where backlog growth is more than 25% annually, demonstrate how quickly the figures in this report could be outdated and how:

- There needs to be better monitoring of the extent of HER backlogs
- Timely action is required to address increasing backlogs of material

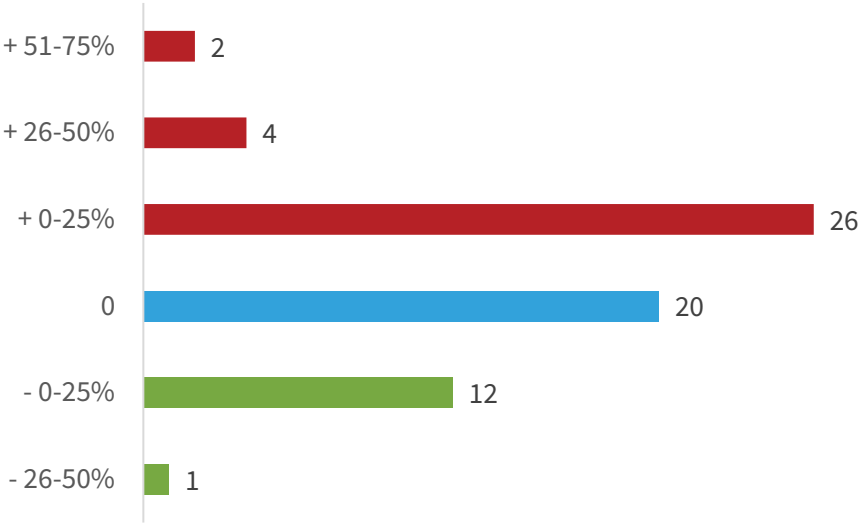

Figure 6: Annual backlog change

2.7 External resources

HERs were asked to select from a list of external resources required to accession their backlog. Staffing was not included in this list. Figure 7 shows that: 44% reported needing digitisation services from external parties and 32% would need metadata for datasets (whether these datasets were internal or external was not asked). 23% of HERs needed no external resources and could begin backlog accessioning projects with internal capabilities if they had the staff time.

Of the 35% of HERs that needed 'other resources', predominantly this was increased staffing. A lack of staffing is cited as the main cause of backlog creation, but there are other resources that need to be considered in any proposed plan to tackle backlogs and some of these will add complexity to backlog accessioning projects.

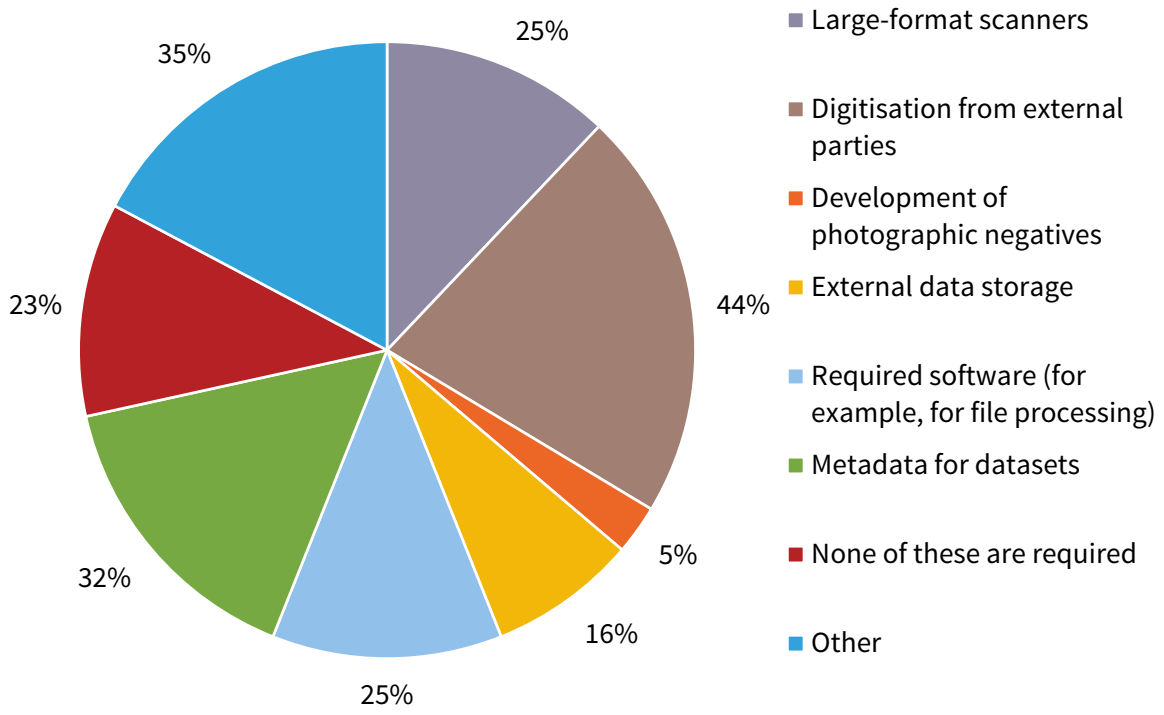

Figure 7: Resources required to accession backlog

2.8 Staffing

When asked if current staffing levels were adequate to address the HER backlog in the next 2 to 3 years, 89% of HERs said 'no'. 47 HERs report in the latest annual survey (2021) that there was less than 1 full-time equivalent position dedicated to the HER. Interviews with HER officers revealed that even HERs with multiple staff struggled to prioritise backlog work, as staff were needed to complete regular tasks and often got co-opted onto other projects.

2.9 Volunteers and Complexity of Accessioning

Of the 64 HERs who responded to this part of the survey, 50 report that historically volunteers have helped in the HER while only 20 currently had volunteers. The shift to homeworking caused by Covid-19

has severely hampered the ability for volunteers to go the physical HER. Licence costs and council IT requirements make it prohibitive for most HERs to give non-HER staff remote access. Furthermore, while volunteers can be extremely helpful — and anecdotally HERs have reported that without volunteers backlogs would be much greater — many HERs do not have the capacity to onboard volunteers, especially if the voluntary placement is short-lived.

49 HERs said that they thought it was acceptable to have volunteers work on backlog tasks, 57 HERs agreed that volunteers could help with record enhancement. While undoubtedly there are some very skilled volunteers (including retired HER officers) and stretched resources have led HERs to use volunteers for backlog work, volunteers should not accession backlog.

The survey did not ask what type of material volunteers were working on nor what stage of accessioning they were involved in, for instance HERs may deem it acceptable for volunteers to be involved with preparing historic building condition reports for accessioning, however they should not be involved with essential planning related information. Creation of new HERs records should be done by paid staff who have the necessary training and knowledge of the individual HER. There must be no precedent for un-paid workers doing core HER officer tasks.

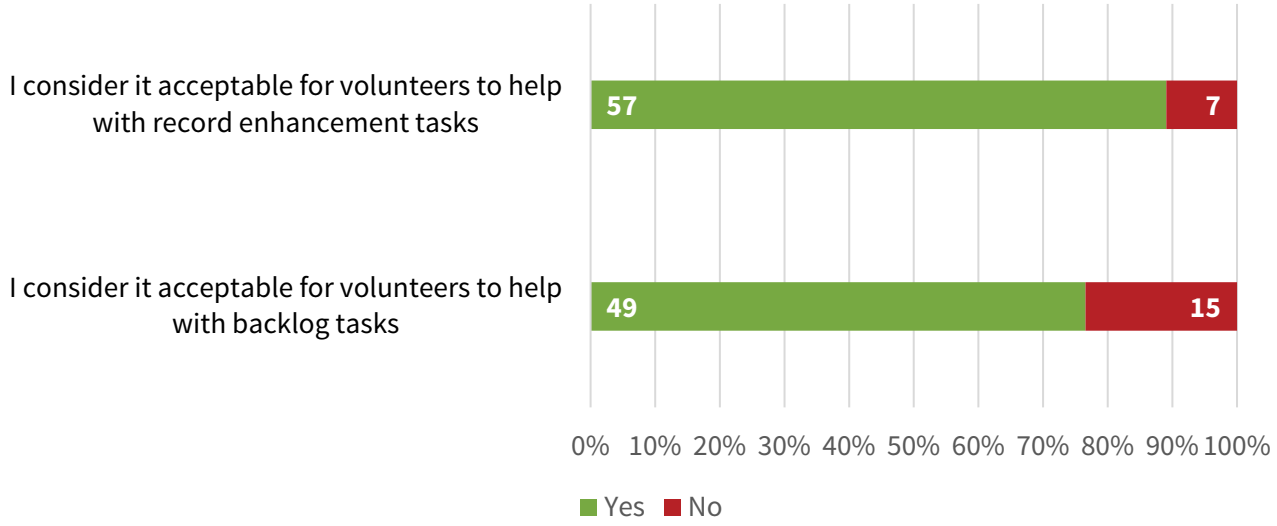

Figure 8: Volunteers in the HER

HERs were asked to rank the 18 resource categories on the scale of 1 to 5 where 1 meant very easy to accession, and 5 meant very difficult to accession. The overall response was that all the categories were neither relatively hard nor easy to accession. However, local research, other published material, and other photographic collections were slightly harder to accession. From the comments, this seems to be because of the difficulty of knowing what information is available, the fact that some information is behind paywalls, and the external scanning capabilities required to accession photographic collections (some of which include slides). Skeleton records were reported as the easiest category to accession.

2.10 Strategies

HERs were asked to select from a list which strategies they use to address backlog and to prevent the creation of new backlog. The top two current strategies in use by HERs are action plans (65%) and being part of the audit process (63%), through which an action plan is created. 16% of HERs said that currently no strategies were in effect. Other strategies provided by HERs through the comment box included: reviews of workflows; use of volunteers and other local authority staff; and supplying feedback to data providers on HER deposits.

HERs were also asked to provide free-text feedback on the efficacy of these strategies. The key points are:

- Volunteers are useful but require HER capacity to set-up, oversee, and input the data created. The shift to homeworking caused by Covid-19 has made volunteer access to the HER system difficult; many HERs cannot physically host volunteers as they may have previously. While volunteers may do enhancement work, unpaid positions to tackle backlog is not a viable solution and volunteers should not be involved with resources critical to the planning process.
- Using OASIS, issuing an event ID for a written scheme of investigation (WSI) when the work starts, allows HERs to know what work is forthcoming.
- While temporary staff brought on specifically to address the backlog are useful, this is not a reliable solution for HERs and does not solve the root cause of the backlog. It is also becoming more inaccessible with the strain on council funds caused by the Covid-19 pandemic.
- For the few HERs who have guidance for contractors, it can be effective but requires initial HER investment of time, and turnover in commercial archaeology can contribute to good habits being lost.
- Better communication between planning and HERs would allow access to built heritage information, perhaps increased compatibility between software systems.
- Standard recording practices and workflows for built heritage would make it easier for HERs to accession.
- Audits were a good way of getting to know the extent of the backlog and creating priorities, but action plans need wider authority support to be truly effective.

The HERs who report that they do not have a backlog are often HERs with multiple staff members; for one HER, staff who do not work full time on the HER are trained and able to help with HER accessioning when the workflow increases thereby preventing backlog creation. Another HER had a dedicated backlog accessioning project when the SMR became an HER. 3 HERs who self-report having no backlog, only consider grey literature as backlog. Other sources awaiting accessioning are classed as enhancement by these few HERs, however according to the definitions of this report they likely do have backlogs.

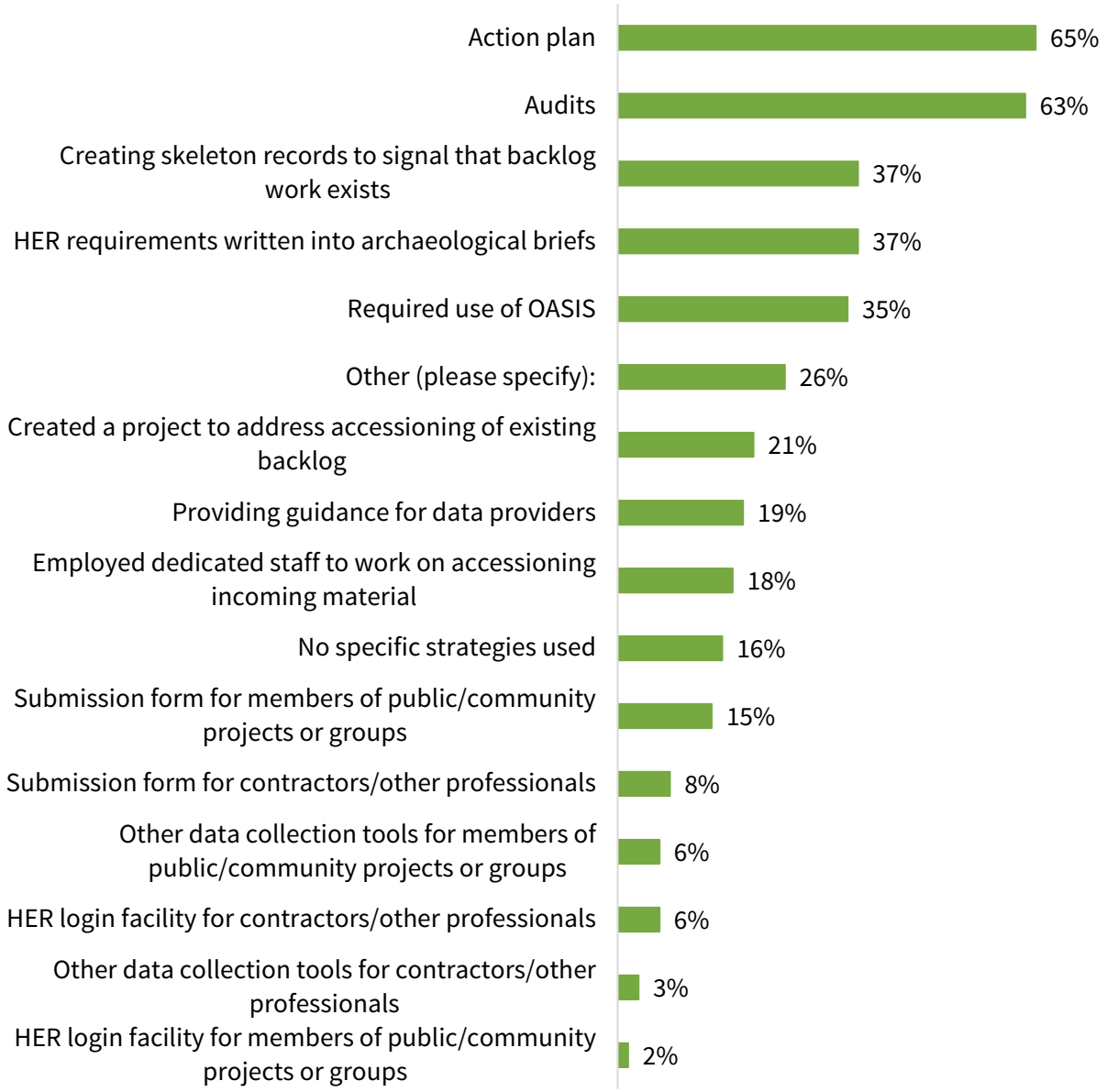

Figure 9: Backlog strategies currently in use

HERs were also asked to identify which factors hindered their ability to reduce their backlog beyond a lack of resources (they could select all that applied). All factors affected over 30% of HERs. Undertaking projects due to income generation requirements, restrictions caused by Covid-19, and an annual increase in commercial searches contributed substantially to HERs' ability to accession materials. Other factors supplied by HERs in the comments included lack of dedicated staff, the NRHE to HER transfer project, loss of staff and staff turnover, and the pressing timelines of other tasks. The mitigation of these factors is considered in the proposed recommendations.

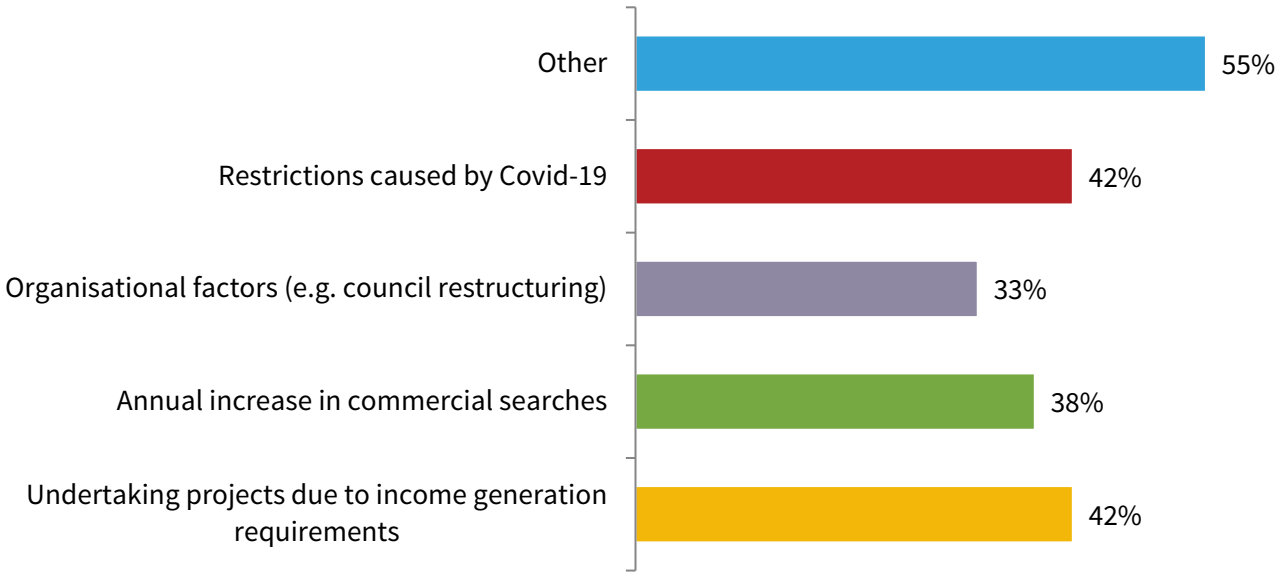

Figure 10: Factors that affect HER ability to tackle backlog (excluding technical capabilities and staffing)

3 Analysis

3.1 How to define backlog

The proposed definitions of backlog and record enhancement outlined in this report are based on the action of accessioning. For example, according to these definitions an aerial photograph showing an earthwork could be added to an existing record of a Roman fort or be recorded as a new monument. In the first instance it is enhancement, and in the second backlog.

This is the way that backlog has been defined in this report. However, backlog could also be defined by its component parts — reports, site plans, photographs — although as evidenced in the survey there is little consensus on what is primarily backlog beyond grey literature and local research. This is because most categories of sources can be both. Thus, it makes sense to define backlog by the way it is accessioned and structure any future program of backlog work on what the HER community considers high priority backlog.

Considering how sources can be seen as both enhancement and backlog, in this report 'backlog' is also used as an overarching term that includes enhancement. Under the umbrella term of backlog, there is enhancement and high-priority backlog. This does not challenge the working definitions, but rather clarifies the way 'backlog' is used to encompass what many HERs see as enhancement.

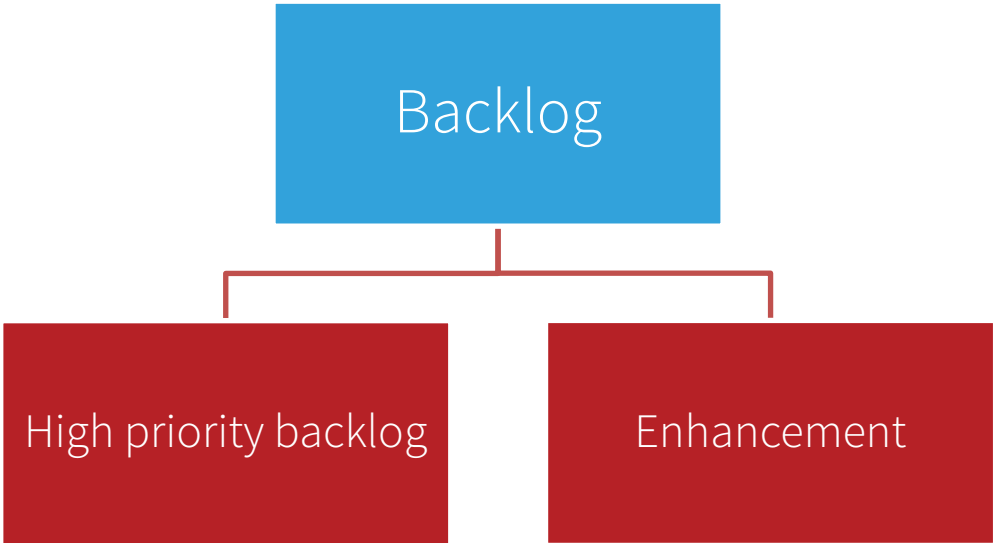

Figure 11: Schematic showing the relationship between backlog and enhancement

The scenarios below propose three ways to approach HER backlogs based on the survey data.

3.2 Backlog Accessioning Scenarios

Backlog 1

Backlog 1 consists of:

1. Grey literature
2. Local research (e.g. projects, reports, survey results, databases, textual documentation)

An HER that just accessioned these two categories would not be fit for purpose, these two categories are separated here because:

- They are the 2 highest priority backlog categories for HERs
- They are the only categories that over 70% of HERs agree are backlog
- More HERs report having these two categories of backlog than any other
- They are both in the top 6 categories for which there is quantified data

Table 4: Backlog 1

Category	% agree it is backlog	Rank (priority)	Rank (HER have this backlog)	% HERs with quantified backlogs in total HER population
Grey Literature	93	1	1 (57 HERs)	71
Local Research	72	2	2 (50 HERs)	67

This report recommends that Backlog 1 be addressed first in any future program of accessioning and is considered national high priority backlog.

Backlog 1a

Backlog 1a consists of:

1. Grey literature
2. Local research (e.g. projects, reports, survey results, databases, textual documentation)
3. Built heritage information generated through the planning system

These three categories are:

- the 3 highest priority backlog categories for HERs
- Over 50% of HERs agree they are backlog
- They are in the top 6 most common categories of backlog and quantification

Table 5: Backlog 1a

Category	% agree it is backlog	Rank (priority)	Rank (HER have this backlog)	% HERs with quantified backlogs in total HER population
Grey Literature	93	1	1 (57 HERs)	71
Local Research	72	2	2 (50 HERs)	67
Built Heritage Information	53	3	6 (40 HERs)	64

Built heritage information generated through the planning system is the third highest accessioning priority for HERs but it does not have the same categorical clarity as grey literature and local research. Integrating built historic environment records has previously been a topic of study as part of the HER 21 research report series (accessed here); the report concluded that substantial resources would be required to make HER information for built heritage comparable to archaeology. In the survey, some HERs included built heritage information as a sub-category of grey literature and others do not routinely accession this information — two of the motivations for this are known (difficulty of accessing the information; belief that it adds little to the HER) but this needs further investigation. It is recommended that HERs are asked as part of the 2022 Annual Survey:

- what sources are considered part of this category?
- who are the authors of this information?
- are these sources routinely accessioned? And if not, why?

If this information is successfully gathered and synthesised, Backlog 1 and Backlog 1a can be combined and national high priority backlog will include built heritage information generated through the planning system, alongside grey literature and local research.

Backlog 2

Backlog 2 consists of the top 9 priority categories for HERs. All 9 of these categories had more HERs label them as backlog than enhancement and a fit-for-purpose HER would need to include sources from all of these categories.

Non-bold text indicates categories where there is less than 50% agreement that this category is backlog, yet still more HERs think it is backlog than enhancement.

1. Grey literature
2. Local research (e.g. projects, reports, survey results, databases, textual documentation)
3. **Built heritage information**
4. Local society journals
5. Skeleton / partial records
6. **Other published material**
7. **Data from national and regional datasets**
8. **Unvalidated OASIS records**[1]
9. Academic studies (PhD theses, dissertations, databases, research projects)

[1] Will be addressed by OASIS V

Backlog 2 represents a potential second or alternate program of work after Backlog 1 and can include high priority backlog and enhancement.

Backlog 3

Backlog 3 is all 18 categories of backlog; non-bold text indicates categories which more HERs think are record enhancement than backlog.

1. Grey literature reports including DBAs (e.g. from contractors, HE and others)
2. Local research (e.g. projects, reports, survey results, databases, textual documentation)
3. Built heritage information generated through the planning system (e.g. conservation area appraisals)
4. Local society journals
5. Skeleton / partial records
6. Other published material (e.g. post-excavation monographs)
7. Data from national / regional databases (e.g. PAS, Defence of Britain, NRHE)
8. Unvalidated OASIS records
9. Academic studies (PhD theses, dissertations, databases, research projects)
10. Historic environment records already identified from aerial photographs (e.g. NMP or aerial reconnaissance)
11. **Other unpublished material (e.g. public submissions, field notes)**
12. Information from historic maps (e.g. first edition OS, tithe maps)
13. Thematic / national journals
14. **Mapping / terrain data (e.g. excavation plans, deposit models, geophysical survey data)**
15. Historic environment records already identified from lidar models
16. Other photographic collections
17. Online sources (e.g. websites, databases, apps, crowd sourcing/citizen science contributions)
18. Aerial photographic collections

Backlog 3 would primarily focus on record enhancement but would address all the current backlog and enhancement projects in the 83 HERs.

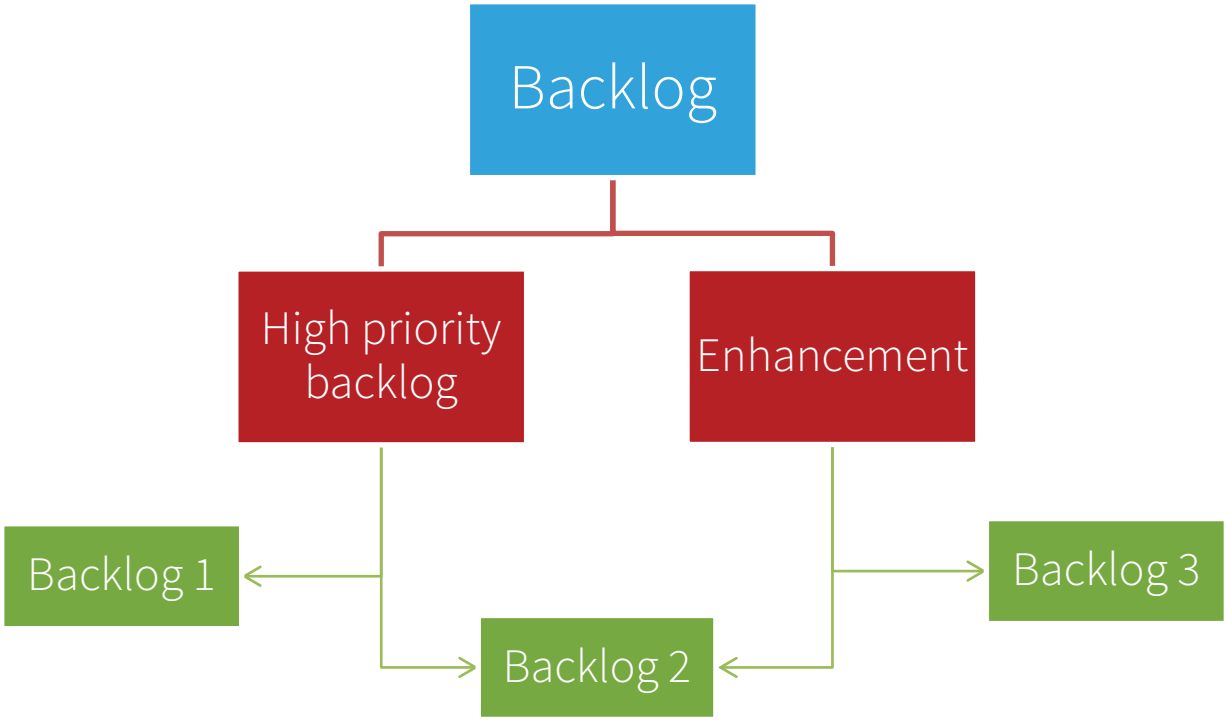

Figure 12: Schematic showing how the three accessioning scenarios fit within the terminology of this report

3.3 Resources

Below is the approximate time it would take one staff member to accession each backlog scenario. The time required for any external resources to be sourced (scanning, software etc.) has not been included. These figures do not represent all HERs and are based on median accessioning rates when HERs did not supply a number (see 3.4).

Table 6: Resources for backlog 1

Backlog Category	Hours	Days	Years
Grey Literature	65563	8742	34
Local Research	34771	4636	18
Totals	**100334**	**13378**	**52**

Table 7: Resources for backlog 2

Backlog Category [1]	Hours	Days	Years
Grey Literature	65563	8742	34
Built Heritage Information	58564	7809	30
Local Research	34771	4636	18
Data from National / Regional databases	31339	4178	16
Other Published Material	30732	4098	16
Skeleton Records	17570	2343	9
Local Society Journals	16102	2147	8
Academic Studies	4022	536	2
Totals	**258662**	**34488**	**133**

[1] Unvalidated OASIS records addressed by the automatization of OASIS V have not been included here.

Table 8: Resources for backlog 3

Backlog Category	Hours	Days	Years
Grey Literature	65563	8742	34
Built Heritage Information	58564	7809	30
Other Photography	57514	7669	29
Aerial Photography	36270	4836	19
Local Research	34771	4636	18
Other Unpublished Material	34224	4563	18
Data from National / Regional databases	31339	4178	16
Other Published Material	30732	4098	16
Skeleton Records	17570	2343	9
Mapping / Terrain Data	16946	2260	9
Local Society Journals	16102	2147	8
Online Sources	4757	634	2
Academic Studies	4022	536	2
Other	1646	219	1
National Journals	943	126	0.5
Totals	**410961**	**54795**	**211**

3.4 Accessioning Rates

As part of the quantification exercise, HERs were asked to give accessioning rates (per hour) for each material type. Accessioning rates vary across HERs and even within category types. However, considering this is the largest amount of data gathered on accessioning rates so far, below is the median rate for each category. Accessioning rates for categories with fewer than 29 responses (less than 50% of the overall response rate) have not been included because of the small sample size.

Table 9: Median accessioning rates

Type	Hours to accession per unit (median)	Accessioning rate per day (median)	Count [1]
Grey Lit (file)	2	4	60
Academic Studies (file)	4	2	38
Local Society Journals (article)	1.75	4	58
Local Research	1	8	90
Other published material	7	1	35
Other unpublished material	1	8	45
Built heritage information	2	4	35
Data from National / Regional Databases	0.5	15	37
Other Photography (file / photo)	0.225	33	31
Skeleton Records	0.5	15	37

[1] when the count is greater than the number of HERs who responded, this is because HERs provided multiple accessioning rates for subcategories of material. Counts lower than 29 have been removed.

4 Recommendations

The headline statistics from this research are that 91% of HERs surveyed report backlogs of un-accessioned material and 49% of HER backlogs are growing, some by more than 25% each year. Not addressing backlogs has serious negative impacts on the efficacy of HER services and creates inconsistencies in the historic record: for example, if information is not readily accessible it creates potential for unsound planning advice; it means HERs are not consistently recording the same information; finding relevant information delays HER responses; and un-accessioned resources are inaccessible to the public who should be able access them. This section sets out recommendations that could help clear legacy backlogs and prevent future backlog creation.

The most effective solution to the current backlog is to fund backlog work; to prevent the accumulation of future backlog HER resources must increase. A programme to address the current backlog should start with grey literature and local research. Being part of the audit programme would be a pre-requisite for this as it allows HERs to ascertain the extent of their backlog. Continuing to support HERs through the 5-year audit cycle must be part of any backlog project. Backlog work cannot be done solely by current HER staff and short-term support should be provided for additional staff. Long-term stable forms of support should be considered to ensure new backlogs are not created.

Short-term

- Identify funding options for backlog work
- Continue to support HERs to join the audit program to enable complete feedback on backlog quantities
    - HERs will be asked as part of their audit to quantify their backlogs using the quantification structure of this 2022 HER Backlog survey
- Ask HERs in the annual survey to
    - report if backlogs are growing, stable, or shrinking
    - feedback on backlog strategies currently in use and their efficacy
    - every other year to provide a quantification of their backlog
- Encourage use of the OASIS V online reporting system, particularly the issuing of an ID as part of any investigation so as to track and plan for future work
- Skeletal records can be used to monitor backlog and provide accurate quantifications, or in the above recommendation to track ongoing work
- Support the HER community to develop consistent approaches to backlogs, including the adoption of the definitions and high priority backlog outlined in this report
- Integrate backlog data into the HER Annual Survey Power BI dashboard to provide HER access and to track backlog trends

- Combine data from across HE on the effect of backlogs on HER service; if needed, bring together case studies to demonstrate the immediate and long-term impacts of backlogs and the benefits of backlog remediation

Many of these initial operational recommendations can be actioned by HE's Heritage Information Partnerships (HIPs) team. Others require the engagement of the HER community through the HER committee and forum.

Medium-term

- Secure funding for backlog clearance
- Recognise that HER staff must have the capability to accession all new materials so as not to add to the existing backlog by
    - Making backlog prevention a key part of new HER posts
    - Targeting support for HERs who currently have increasing backlogs
- Assist HERs with backlog scoping projects if this is an impediment to joining the audit program
- Run a workshop to look in more detail at the challenges and barriers around workflows and practices that compound backlog creation
- Reassess Informing the Future of the Past (IFP) to include effective backlog workflows and national accessioning guidance — for example the accessioning of DBAs with new information
- Template submission forms for data providers (members of the public / contractors) for HERs to adapt and implement to streamline accessioning
- Provide training and guidance based on the FAIR principles for data providers on why good record creation and supporting metadata benefits everyone
- Establish regional backlog working groups or forums to provide a supportive space for HER officers to share challenges and provide solutions
- Support for new starters including easy access to past audits, annual survey responses, and backlog figures
- Identify training needs and research an upskilling programme
- Work to raise awareness among authorities of the importance of an appropriately resourced and up to date HER

The stakeholders that need to be consulted as part of the implementation of these medium-term recommendations are: ALGAO, CIfA, HE, and the HER committee. CIfA and ALGAO should be involved with any training and awareness-raising activities. Continued collaboration between HE and HERs — via the HER committee, HIPs team and HER forum — will make sure English HERs are essential contributors to these recommendations.

Long-term

- Secure funding for backlog clearance
- Research strategies to make it easier for HERs to find new research relevant to their HER (for example, automated sets of results of new journal articles published in the main national journals for each HER)
- Remote access to HER systems for verified users who could create records for HERs to then validate

Planning for these long-term recommendations should include these key groups: ALGAO, ADS, HE, and the HER committee.

5 Conclusions

This research into HER backlogs (2022) has outlined the extent of un-accessioned materials across the 83 English HERs: 91% of the HERs surveyed report having a backlog with a slightly higher concentration of HERs with backlogs in the North-East, Yorkshire, Midlands, and South-West. Grey literature, local research, and articles from local journals are the three most common forms of backlog with grey literature and built heritage information requiring the most staff time to address. The highest priorities for backlog accessioning are grey literature, local research, and built heritage information and this report has suggested that the first two be the focus of any initial backlog remediation.

Strategies to address and monitor backlogs that have worked for HERs include audits, action plans, creating skeleton records to highlight backlog work, and making HER requirements part of commercial briefs. However, many HERs are under-resourced and a lack of staffing is the biggest contributor to the growth of backlogs (both historically and in the present). Currently, 89% of HERs are unable to tackle their backlog with current staffing levels in the next 2 to 3 years. Only 15% of HERs can accession all newly deposited information into the HER and 22% report that all new deposits are added to the backlog. This means that 49% of HER backlogs are growing, some by more than 25% each year. External resources, such as digitisation by external parties, are also required by HERs to accession material and must be considered in any future plan.

The extent of HER backlogs outlined in this report will likely be inaccurate in the coming years considering backlog growth and the difficulty of getting accurate breakdowns of backlog amounts — this is a time-consuming task for already stretched HERs — generally between 60% and 75% of HERs supplied quantified backlog figures. Recommendations for monitoring backlogs are: to continue to help HERs to join the audit process; ask for backlog quantities during the audit based on the structure of this survey; monitor backlog growth via the annual survey; and offer scoping projects for those HERs who do not have the resources to classify their backlog. Threats to planned backlog work may include pressing digitisation projects caused by office moves or reduction in HER space, staff absences, hiring restrictions that can make it hard to bring on temporary staff, and unexpected demands on existing HER staff time. Considering that 38% of HERs report an increase in commercial searches, it is likely that staff time dedicated to backlog work will decrease while backlogs grow.

The primary solution to the existing backlog is a targeted programme of accessioning done by additional staff. However, HERs with currently increasing backlogs demonstrate that there needs to be long term strategies; ideally, all HER backlogs need to be stable or decreasing. This would require an emphasis on backlog work as a core part of the HER role, increased staff resources, and a recognition of the integral place of HERs in the planning system.

6 Appendix

Backlog Quantification Data

Table 10: Breakdown of HERs with each category of backlog, meant to provide context for the quantification discussion

Category	Total HERs with this backlog	Quantified	Not quantified	HERs without this backlog	Unknown	Total HERs	Synthesis of HER Comments
Grey Literature	57	*48*	*9*	11	15	83	Physical backlog hard to classify depending on office access.
Academic Studies	42	*30*	*12*	22	19	83	Hard to know the value of some of this backlog until the point of accessioning. Structure of HBSMR makes it hard to add in radio-carbon dating (software limitations).
Local Society Journals	48	*37*	*11*	17	18	83	Physical copies in HERs hard to check with working from home requirements.
Thematic / National Journals	29	*12*	*17*	27	27	83	Access (often behind paywalls) and copyright issues
Local Research	50	*36*	*14*	16	17	83	Very varied material

Online Sources	26	*19*	*9*	33	24	83	Low quantification rate. Many mention CITiZAN. Would need researching for some HERs
Other published material	32	*24*	*8*	30	21	83	Post-excavation monographs, Pevsner, time-consuming
Other unpublished materials	33	*25*	*8*	30	20	83	Variety of sources including public submissions, field notes. Hard to assess extent.
Built Heritage Information	40	*26*	*14*	27	16	83	Hard to assess extent. Some included with grey lit.
Unvalidated OASIS records	37	*26*	*11*	27	19	83	Some HERs do not validate OASIS records. Not viewed as backlog by some HERs. OASIS V will address this.
Data from National / Regional Databases	41	*24*	*17*	26	16	83	The majority of this is NRHE and PAS. Not all HERs accession PAS data
Mapping and Terrain Data	27	*15*	*11*	38	18	83	Often included with grey literature so can be represented elsewhere
Historic Maps	36			33	14	83	This was a yes or no question. Often this has been done but there is scope for re-examination
HER records already identified from Aerial Photography	26			43	14	83	This was a yes or no question. Primarily NMP data.
HER records already identified from LiDAR	16			53	14	83	This was a yes or no question. A few HERs have LiDAR-related volunteer projects in the area.

Aerial Photography	33	*22*	*12*	34	16	83	Physical archives need scanning, time consuming task is the metadata, sorting out born-digital collections
Other photographic collections	36	*25*	*11*	32	15	83	Many are associated with planning and built heritage. A few HERs with very large slide collections.
Skeleton records	30	*21*	*9*	39	14	83	High level of quantification. Some overlap here with grey literature backlog, this has been considered.
Other	13	*8*	*6*	57	13	83	Very specific projects

Survey Questions

1. These are the proposed definitions of backlog and record enhancement. Do you agree? If not, please propose an alternate definition or suggest key missing elements.

2. According to the above definitions, does the HER have backlog and record enhancement projects?

3. Normally when the HER accessions grey literature reports, does it include desk-based assessments, monuments data, and events data? If not due to resource constraints, in ideal circumstances would it include these on the HER?

4. Does the HER consider these categories primarily backlog, record enhancement or neither? *

5. Please quantify the volume of each category of backlog according to the unit supplied for all relevant formats, even if the HER considers this record enhancement.

6. 29. Are any external resources required to accession backlog materials? *

7. Do volunteers currently work in the HER and does the HER think it is acceptable for volunteers to help with backlog and enhancement tasks?

8. Please rank backlog categories in terms of ease of accessioning for HER staff

9. Please rank backlog categories in terms of priority for accessioning

10. Which factors determine accessioning priority

11. Do you prioritise your backlog, and are you actively working to clear it?

12. Are the current staffing levels adequate for addressing the HER backlog within a reasonable project timeline (2 – 3 years)?

13. Which factors affect the HERs ability to tackle backlog (excluding technical capabilities and staffing)?

14. In an average week, can all the newly deposited material be accessioned by the HER?

15. Not including one-off projects, annually by how much does the backlog increase or decrease?

16. What strategies has the HER used to address backlog and prevent further backlog creation?

17. Were the strategies used effective or ineffective?

Historic England

We are the public body that helps people care for, enjoy and celebrate England's spectacular historic environment.

Please contact HIPsTeam@HistoricEngland.org.uk with any questions about this document.

HistoricEngland.org.uk

If you would like this document in a different format, please contact our customer services department on:

Tel: 0370 333 0607
Email: customers@HistoricEngland.org.uk

All information and weblinks accurate at the time of publication.

Please consider the environment before printing this document

Publication date: v1.0 March 2022
Design: Historic England