SoE 2021 Heritage Supplementary Report 4

Heritage Expert Survey – Approach and Results

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Notes & Disclaimer

This is an independent report by the author. The views expressed in this report do not necessarily reflect those of the Department of Agriculture, Water and the Environment.

The information in this report is current to March 2021.

The author has taken all reasonable care to ensure the information provided in this report is accurate. However, there may be inadvertent errors that have occurred in compiling this report. The author takes no responsibility where this is the case.

Contents

Abbreviations

DAWE   Department of Agriculture, Water and the Environment

ICOMOS International Council on Monuments and Sites

IUCN   International Union for Conservation of Nature

SOE   State of the Environment

1   Introduction

Because of a lack of systematic reporting on heritage, the SoE 2021 Heritage chapter has been informed by data from heritage and protected area agency, and local government, surveys; by expert opinion sought through general consultation, workshops and an on-line survey; and by existing reports and publications.

This document reports on, and presents the results from, the Heritage Expert Survey, an on-line survey that was undertaken as part of the expert elicitation undertaken to provide up-to-date, expert data for the SoE 2021 Heritage chapter. It has been prepared as a supporting document to the Australia State of the Environment 2021 Heritage chapter (McConnell et al. 2021). (A similar on-line heritage expert survey was undertaken for the SoE 2016 Heritage chapter).

The Heritage Expert Survey was aimed at acquiring independent, expert opinion on the current state (condition) of heritage in Australia, the key pressures on heritage, the effectiveness of heritage management, and the trends in relation to these. The survey, through its design and audience, sought to elicit this information for the four key types of heritage recognised in Australia today – Indigenous heritage, historic heritage, geoheritage, and natural heritage[1].

To achieve this, the survey targeted individuals with high level expertise in heritage conservation and management at the national level, and to a lesser extent at the state and territory level.

The Heritage Expert Survey was designed, run and analysed by the SoE 2021 Heritage chapter lead author, Anne McConnell. Social researcher, Ella Horton, provided significant assistance in setting up the survey. The survey was run in early-mid 2021.

The general approach and the design of the Heritage Expert Survey is outlined in Section 2 of this Supplementary Report, the nature of the participant response is outlined in Section 3, and the results are presented in Section 4.

The other expert opinion and data collected for the 2021 Heritage reporting is presented in the following Supplementary Reports:

- **Heritage Supplementary Report 1** - Annotated Listing of Australian Heritage Protection Legislation (including international instruments) (McConnell & Janke 2021).

- **Heritage Supplementary Report 2** - Heritage and Protected Area Agency Survey Approach and Results (McConnell 2021a).

- **Heritage Supplementary Report 3** - Local Government Survey Approach and Results (McConnell A 2021b).

- **Heritage Supplementary Report 5** - Heritage Expert Workshops Approach and Results (McConnell 2021c).

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[1] Given that geoheritage is treated as a separate category of heritage, 'natural heritage' relates primarily to biological values.

2   Approach

General Approach
The SoE 2021 Heritage Expert Survey comprised the following stages:

- approach development
- survey development
- advertising
- active on-line survey
- analysis (and reporting).

The survey approach was developed in late 2020 based on the expert on-line survey approach used in acquiring expert opinion for the SoE 2016 Heritage chapter report (refer Mackay 2017) to assist in making comparisons between the two reports. The report author, Richard Mackay, kindly provided digital copies of the 2016 survey questions and tabulated results.

The 2021 Heritage Expert Survey had some additional questions and took a slightly modified approach to how it treated heritage. Most modification was necessary to accommodate the broader scope of, and other changes to, the SoE 2021 (in particular greater Indigenous involvement, the inclusion of wellbeing, a stronger focus on governance, and a changed report chapter structure that invited the consideration of heritage by its four key component types). The consideration of heritage as 4 types, rather than 3, through the inclusion of 'geoheritage', also made the broadening of the target audience to specifically include experts in different types of heritage desirable.

The survey was developed in early 2021. An initial set of draft survey questions and explanatory notes developed by the author were reviewed by Ella Horton and the author in an iterative process to refine the questions, to improve clarity and presentation as an on-line survey, and to facilitate the analysis of the results. A final draft set of survey questions and explanatory notes was reviewed by the SoE 2021 Heritage chapter Indigenous co-author, Terri Janke, and by the SoE 2021 team in the Department of Agriculture, Water and the Environment (DAWE) to ensure general SoE requirements and Indigenous heritage aspects were adequately covered. The proposed survey audience was also reviewed by Terri Janke.[2] Amendments were made based on the feedback from this review.

The on-line survey ran from the 18th March 2021 to the 12th May 2021. Initially it was scheduled to close on the 26th April 2021, but it was extended due to some organisations having difficulty in receiving the survey invitations and distributing them internally. The on-line survey platform was Survey Monkey.

Email invitations were sent to the target organisations and individuals at the start of the survey (i.e., 18th-23rd March 2021) advising of the SoE 2021 Heritage Expert Survey and its purpose, inviting participation, and asking the organisations forward the invitations to the nominated expert members. Invitations to government statutory and advisory bodies (see *Survey audience*, below) were reviewed by the DAWE SoE 2021 team, who also provided assistance in emailing these invitations.

Once the on-line survey had closed, the results were downloaded and collated by Ella Horton. This was completed in mid-June 2021. The results were then analysed by the author and included, as appropriate, into the SoE 2021 Heritage chapter.

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[2] Note: There was a change-over of Indigenous co-author for the Heritage chapter in late-2020 – early 2021, which meant that neither Heritage chapter Indigenous co-author was available in the key development phase of the Heritage Expert Survey, hence the survey could not be co-designed.

Survey Audience

The survey audience for the 2021 Heritage Expert Survey were individuals with a high level of expertise or experience in heritage management in Australia, who could comment knowledgeably on Indigenous and historic heritage, geoheritage, and natural heritage (primarily biological values). Key targets therefore were national peak heritage organisations and national, and state and territory heritage statutory and advisory bodies.

The target organisations were as follow:

Statutory Councils/Committees

- Australian Heritage Council
- ACT Heritage Council
- Northern Territory Heritage Council
- Heritage Council of NSW
- Heritage Council of Victoria
- Heritage Council of Western Australia
- Queensland Heritage Council
- South Australia Heritage Council
- Tasmanian Heritage Council

- NSW Aboriginal Cultural Heritage Advisory Committee
- South Australia State Aboriginal Heritage Committee
- Tasmanian Aboriginal Heritage Council
- Victoria Aboriginal Heritage Council
- Western Australia Aboriginal Cultural Materials Committee

- NSW National Parks and Wildlife Advisory Council
- South Australia Parks and Wilderness Council
- Tasmanian National Parks and Wildlife Advisory Council
- Victorian National Parks Advisory Council
- Western Australia Conservation and Parks Commission

National Advisory Committees

- Australian World Heritage Advisory Committee
- Australian Institute of Aboriginal and Torres Strait Islander Studies Council

National Peak Bodies

- Australia ICOMOS
- Australian Archaeology Association
- Australian Indigenous Archaeologists Association
- Australian Council of National Trusts
- Australian Committee of IUCN
- Australasian Wildlife Management Society
- Australian Freshwater Sciences Society
- Australian Mammal Society
- Australian Marine Conservation Society
- Ecological Society of Australia
- Australian Cave and Karst Management Association
- Australian Speleological Federation (Conservation Commission)
- Geological Society of Australia (Geoconservation Committee)
- National Parks Australia Council

All members of the various councils and committees were invited to participate in the survey. In relation to the national peak bodies, the members of the executive committees and/or relevant specialist committees or groups were invited to participate in the survey. Five invitations were also emailed to individual experts regarded as unlikely to be included in the group invitations.

This approach was designed to target highly expert or experienced individuals, to balance responses across the different types of heritage, and to keep the number of responses to a manageable number (assuming a high response rate by invitees).

The inclusion of Indigenous participants in the Heritage Expert Survey was limited. This was primarily because a broader mechanism for Indigenous expert consultation (undertaken by Indigenous consulting group Murawin) was established for SoE 2021. The results of this consultation are reported in Murawin (2021), an Indigenous chapter supplementary report.

Survey Design

The Heritage Expert Survey comprised a set of questions related to the current state (condition) of heritage, current pressures on heritage, and the current management of heritage; plus a small number of demographic-related questions and explanatory introductory text. The survey questions and explanatory notes are provided in Appendix 1 of this report.

The survey included a range of question types, including multiple choice (the selection of only one option from a list), checkbox (the selection of multiple options from a list), Likert scale (all 5-point with various numbers of items within the question) and free-text. The questions were presented in blocks as follows:

- Respondent profile: 5 multiple choice questions designed to understand respondent heritage background and level of expertise (i.e., heritage demographic)

- State and trend of heritage: 2 questions – 1 x Likert scale (4 items) and 1 free text

- Pressures on Australia's heritage: 3 questions – 1 x checkbox (23 options) and 2 x Likert scales (16 items and 4 items)

- Management of Australia's heritage: 2 questions – 1 checkbox (21 options*) and 1 Likert scale (14 items[3])

- Australian Heritage Strategy: 2 questions – 1 Likert scale (2 items) and 1 free text

- Further comment: 1 free text question for any additional comments

The 2021 Heritage Expert Survey used the same questions as the SoE 2016 Heritage online survey, but included some additional questions and data categories within individual questions to make it more relevant to 2021 issues and the different approach of the SoE 2021 Heritage report.

The most significant design modification from the SoE 2016 Heritage chapter approach was the construction of the survey to provide differentiable responses based on the type of heritage being considered (i.e., natural heritage (general), geoheritage, Indigenous heritage and historic heritage). This was achieved by asking respondents to identify their main area of heritage expertise, which took them to the relevant heritage type set of questions. Recognising that some respondents might have high level expertise in more than one area of heritage, respondents were allowed to nominate a second main area of heritage expertise if desired and complete the set of questions for that second heritage type. The differentiation of heritage type was seen as important because the state, pressures and management of the different types of heritage are different, and matching heritage expertise type with the appropriate heritage type improves the reliability, hence credibility, of the data.

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[3] Indigenous heritage had one additional option/item per question.

The survey was designed to allow respondents flexibility in responding, including skipping questions and identifying less (or more) than the required number of items in the multiple choice questions. While this provided greater user flexibility, it created minor complications with data analysis.

Although respondents were asked how they received the survey (with those not selecting an invited category excluded from the results[4]), the survey did not include controls to ensure that only invited people participated and that each respondent took the survey only once. This was difficult to do as participants were anonymous and it was not considered necessary given the nature of the survey, and because it was disseminated through specific channels.

Survey Analysis

The Heritage Expert Survey responses were analysed by simple comparative statistical treatment using IBM SPSS (Statistical Package for the Social Sciences) Version 27 and Excel. The graphics were generated in Excel.

In relation to the analysis, the following should be noted:

- Some respondents indicated <5 or >5 responses in checkbox questions where they were asked to nominate 5 options. Their responses were kept as is for analyses.

- Means were calculated for Likert scales, noting there are potential issues in doing so, in particular when applying means from a '1' to '5' unitary scaling system to a 0 to 5 scale.

- Weighted means were calculated for items where a Likert scale was used (i.e., the mean was calculated using the number of responses for each individual item).

- 'Unsure / don't know' responses were attributed a value of 0 and thus deleted from Likert scales when calculating means.

All free text answers provided by the respondents were copied into the report without modification, except to correct typographical and minor grammatical errors.

Survey Reporting

This report provides all primary data from the on-line Heritage Expert Survey. Minimal analysis has been undertaken, but the data has been reviewed and reformatted, and necessary corrections and qualifications made.

No individual respondents have been identified in this report given the Heritage Expert Survey confidentiality undertaking that individual responses would be treated as confidential and that individual responses would not be identified without the permission of the respondent.

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[4] No such participation was identified.

3   Response to Survey

The Heritage Expert Survey had 71 individual respondents (participants).

When the additional responses by those with 2 main areas of heritage expertise are factored in, this represented 82 separate responses across the 4 areas of heritage expertise (i.e., heritage type).

There was approximately equal representation across the 4 heritage types. The breakdown of responses by heritage type is as follows

Respondent Area of Expertise	Frequency	Percent
Natural heritage (general, primarily biological)	21	25.6
Geoheritage	17	20.7
Indigenous heritage	24	29.3
Historic heritage (includes underwater cultural heritage)	20	24.4
Total	*82*	*100.0*

The following table indicates the proportion of respondents from the different parts of the targeted survey audience:

Audience Type	Frequency	Percent
Member of a statutory or advisory council/committee	20	28.2
Member of a professional heritage/environmental peak body	44	62.0
Member of an Indigenous heritage/community organisation	3	4.2
Other independent expert	4	5.6
Total	*71*	*100.0*

Respondent Demographics
The respondents came from across Australia and represent a spread of ages, years of experience, and types of heritage role, as well as heritage expertise.

The following table indicates where in Australia (by state/territory) respondents primarily undertake their heritage work (only one location could be selected per respondent):

Primary location of work	Frequency	Percent
At the national level	12	16.9
ACT	3	4.2
Qld	10	14.1
NSW	12	16.9
SA	11	15.5
Tas	6	8.5
Vic	6	8.5
WA	11	15.5
Total	*71*	*100.0*

The following table indicates the primary heritage role of respondents. (Respondents in the 'none of the above' category are likely to be retired professionals as there was not separate category for this):

Primary role in heritage	Frequency	Percent
Government officer	17	23.9
Community officer/advisor/liaison	10	14.1
Consultant	15	21.1
Academic	10	14.1
Other professional	15	21.1
None of the above	4	5.6
Total	*71*	*100.0*

The following table indicates how many years respondents have been working in heritage:

Number of years working in heritage	Frequency	Percent
0 - 10	9	12.7
11 - 20	9	12.7
21 - 30	18	25.4
31 - 40	22	31.0
> 40	13	18.3
Total	*71*	*100.0*

Respondent Comments about the survey

In the final free text question (Do you have any additional comments?), respondents provided the following comments about the survey approach:

- Heritage is interconnected: the divisions between 'historic' 'Indigenous' 'natural' and 'geoheritage' are a colonial construct.

- I disagree with the splitting into the three environments. My current work is with Indigenous communities, and primarily associated with post-colonial occupation period, hence [my] choosing [of] 'historic'.

- The question about where one works is inadequate. I work equally in Victoria and at the national level, and in NSW. Important to note this in your reporting as a limitation.

- As there is largely no longer any SoE Reporting at the State and Territory level, thank-you for the opportunity to participate in this SoE reporting review.

4   Survey Findings

4.1   Natural Heritage (general)

Heritage State and Condition

Question: How strongly do you agree with the following statements about the state and trends of Australia's natural heritage?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 21.

Statement	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)	Unsure/ Don't know/ No response
Significant progress has been made in the collection of data to facilitate statutory listing for natural heritage	0	4	8	7	0	(2)
The amount of listed natural heritage places has increased	0	14	3	2	1	(1)
There have been more systematic, thematic or regional natural heritage assessment projects	0	3	9	5	1	(3)
The majority of Australia's natural heritage places are in good condition and retain integrity of their identified values	0	4	5	8	4	(0)

Question: Do you have any further comment on the state and trends of Australia's natural heritage?

The comment (free text) provided in relation to this question is provided in Respondent Comment, below.

Pressures on Heritage

Question: What are the pressures which are having the greatest adverse impact on Australia's natural heritage?

The following table presents the collective respondent view of which pressures / threats are seen as having the greatest adverse impact on Australia's natural heritage (general). Respondents were asked to indicate which 5 pressures they believed are having the greatest impact (at the present time). The figures in 'Degree of Impact' are cumulative totals, with each respondent selection having a value of 1. The higher the number, the greater the perceived impact of the pressure / threat.

Pressure / Threat	Degree of Impact (0 – low)
Climate Change: Rising temperatures	13
Climate Change: Changing rainfall	5
Climate Change: Rising sea level	2
Climate Change: Altered fire regimes	10
Climate Change: Extreme weather events	11
Industry: Industrial development	2
Industry: Industrial pollution	0
Industry: Resource extraction	5
Industry: Rural development - land clearing	10
Industry: Rural development - land use intensification and land use change	2
Industry: Tourism	2
Population: Population growth	5
Population: Population shift resulting in urban densification and renewal	0
Population: Population shift resulting in urban spread	0
Population: Service and infrastructure development (e.g., energy, water, transport, supply)	1
Population: Recreation and leisure activities	2
Population: Community perceptions of value	2
Governance: Inadequate protections (poor statutory controls and poor governance)	5
Governance: Inadequate realisation of community aspirations (relates to ownership, engagement, wellbeing)	1
Governance: Inadequate resourcing for heritage conservation/management	11
Other: Invasive species	10
Other: Human disasters (e.g., war, pandemics, infrastructure failure)	0
Other (please specify)	0

Question: How do you perceive the level of impact of the following pressures on Australia's natural heritage?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 21.

Statement	Very high impact (1)	High impact (2)	Low impact (3)	Very low impact (4)	No impact (5)	Unsure /Don't know /No response
Climate Change: Rising temperatures	11	9	0	0	0	(1)
Climate Change: Changing rainfall	6	14	0	0	0	(1)
Climate Change: Rising sea level	1	12	5	0	0	(3)
Climate Change: Altered fire regimes	12	6	2	0	0	(1)
Climate Change: Extreme weather events	8	9	2	0	0	(2)
Industry: Rural development & land clearance	10	9	1	0	0	(1)
Industry: Resource extraction	6	11	2	1	0	(1)
Industry: Secondary industry	1	5	11	1	0	(3)
Industry: Tourism	1	8	7	2	0	(3)
Population: Population growth	1	12	6	1	0	(1)
Population: Population shift		9	9	1	0	(2)
Population: Community use	1	4	14	1	0	(1)
Population: Community perceptions of value	1	11	7	1	0	(1)
Governance: Poor statutory controls and poor governance	5	13	2	0	0	(1)
Other: Invasive species	9	9	2	0	0	(1)
Other: Human disasters	0	7	9	3	0	(2)

Question: How do you perceive the level of impact of the above pressures (see previous question) on the following aspects of Australia's natural heritage?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 21.

Statement	Very high impact (1)	High impact (2)	Low impact (3)	Very low impact (4)	No impact (5)	Unsure /Don't know /No response
The amount (area) of protected of natural heritage places, areas, etc.	6	12	2	0	0	(1)
The integrity of natural heritage places, areas, etc.	13	7	0	0	0	(1)
Biodiversity	9	10	1	0	0	(1)
Habitat	11	9	0	0	0	(1)
Connectivity	8	12	0	0	0	(1)

Heritage Management

Question: Which management actions are of highest priority to improve the protection of Australia's natural heritage?

The following table presents the collective respondent view of which management actions (i.e., those listed) are regarded as being of highest priority for the protection of Australia's natural heritage (general) at the present time (2021). Respondents were asked to indicate which 5 actions they believed to be of highest priority. The figures in 'Level of Priority' are cumulative totals, with each respondent selection having a value of 1. The higher the number, the greater the perceived priority.

Management Action	Level of Priority (0 – low)
Protection: Improved recognition, including at the statutory level, for the broad range of natural heritage	12
Protection: Improved heritage legislation	6
Protection: Improved planning provisions for heritage	3
Protection: Australia's ratification of international heritage related conventions, declarations, and other policies	1
Protection: Greater management planning for heritage places	4
Identification: Improved identification and assessment of natural heritage	2
Identification: Improved resourcing for the identification and assessment of natural heritage	3
Management: Improved government resourcing for the management and protection of natural heritage	14
Management: Improved structures, processes, and governance generally, in place to coordinate and manage natural heritage	6
Management: Improved risk assessment adaption/risk mitigation planning for new threats/risks	8
Management: Greater monitoring of the state/condition of natural heritage places	12
Management: Greater natural heritage management (including governance) evaluation	6
Management: Improved natural heritage management systems (including better cross-system standardisation)	2
Management: Greater leadership in heritage protection from government	8
Management: Maintenance and review of the Australian Heritage Strategy.	1
Governance: Greater community participation in natural heritage management	4
Education: Improved training opportunities for heritage professionals	1
Education: Improved trades/traditional skills training opportunities	0
Education: Improved heritage education for the community	3
Presentation/Celebration: Improved presentation of natural heritage (including through the presentation of more places, improved heritage information and facilities)	4
Other (please specify)	0

Question: How strongly do you agree with the following statements about how well Australia's natural heritage is currently being managed?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 21.

Statement	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)	Unsure/ Don't know/ No response
Governance: The community has a satisfactory level of participation and voice in natural heritage management, including in decision making	0	5	6	8	1	(1)
Governance: The way in which Australia's natural heritage is managed and the existing level of protection contributes positively to community well-being	1	7	6	4	2	(1)
Identification: Australia's natural heritage is well understood and appropriately recognised	0	5	2	12	1	(1)
Identification: Adequate resources are available for the survey, identification and assessment of Australia's natural heritage places	0	3	1	7	9	(1)
Protection: Australia's natural heritage receives adequate protection through existing statutory controls	0	3	5	6	6	(1)
Protection: Appropriate management plans or other mechanisms are in place for the management of Australia's natural heritage places	0	2	5	10	3	(1)
Protection: Decisions regarding natural heritage places are well informed by an understanding of heritage values and relevant national and international principles and guidelines	0	6	7	4	2	(2)
Protection: Risks to natural heritage due to climate change are adequately understood and there is good preparedness through adaptation, risk management and/or sustainability planning where relevant	0	1	1	10	8	(1)

Protection: The use of international heritage related guidelines and policy strengthens the protection of Australia's natural heritage	0	15	3	1	0	(2)
Management: There are appropriate governance structures in place to coordinate and manage natural heritage in Australia	0	8	4	6	2	(1)
Management: There is adequate monitoring and evaluation of the health and management of Australia's natural heritage in place	0	1	2	9	7	(2)
Management: Management needs and processes are well understood and are well managed by those responsible for managing Australia's natural heritage places	0	4	2	10	3	(2)
Management: Adequate resources are available to support the management of Australia's natural heritage places	0	2	1	4	11	(3)
Presentation/celebration: natural heritage places in Australia are accessible, well presented and contribute to the community's sense of place	1	8	8	2	1	(1)

Respondent Comment

Comment on the state and trends of Australia's natural heritage

- Climate change and invasive species are impacting negatively on natural heritage.

- Climate change is affecting the condition and integrity of natural heritage areas. Whilst Australia has some of the best managed World Heritage Areas in the world, climate impacts require more than a 'business as usual' response.

- Until we effectively address global issues such as climate change impacts and the loss of biodiversity, it is difficult to envisage how condition and integrity will not continue to decline.

- Natural heritage is in decline (5 of Australia's natural World Heritage Areas were downgraded in the 2020 IUCN World Heritage Outlook Report) due to invasive pests, climate change and extreme fire. Despite the integrity of the areas, climate induced change is affecting the Outstanding Universal Value of areas, with evidence of species decline from increased heat and fire proneness in areas that don't traditionally burn (rainforest - for example). There is no coordinated or determined response to build the resilience of World Heritage areas outside of business as usual, which does not adequately address the impacts being experienced. Not only the Great Barrier Reef has the potential to be a World Heritage Area in Danger.

- I operate in Queensland, where a number of our World Heritage sites listed for their natural values are under considerable duress, including the Great Barrier Reef, the Gondwana Rainforests of Australia and Fraser Island (K'gari), but this is a trend that is being repeated nationally across many other natural World Heritage properties including Shark Bay, the Ningaloo Coast and Tasmanian Wilderness. Sadly, these areas probably represent some of Australia's **best managed** heritage. Five sites had their status downgraded in the IUCN Outlook Report 2020: Great Barrier Reef (from significant concern to critical), Gondwana Rainforests of Australia and Greater Blue Mountains (from good with some concerns to

significant concerns), Ningaloo Coast and Shark Bay (from good to good with some concerns). This assessment was undertaken before the 2020 bushfire on Fraser Island (K'gari) where over 50% of the island burnt.

- Retaining wilderness and wild character needs much greater emphasis.

- Private land conservation needs to be a focus.

- It is unfortunate that the worldwide recognition of Australia's natural heritage is not matched by commitment from local, state and commonwealth governments.

- I observe a lack of knowledge by land managers and even less resourcing to facilitate management practices to maintain our natural world. The biggest example is the need to consider alternative renewable energy, but these projects are carving up endangered habitat under the [guise] of reducing emissions.

- The public do not know the values of the natural world and land area middle management is buried in paperwork instead of leading teams implementing management practices. Twice now managers have directed me to conduct land management in visual proximity to the public rather than apply methods to strengthen relatively good bushland. The focus is to be seen rather than follow established, proven practices.

- Increased public usage of natural heritage places is not being matched by resources to manage people pressure and protect values.

- Our natural and cultural heritage is under constant threat from governments, industry and some sections of the community. This is further amplified by a significant lack of resource in heritage management and protection.

- Natural heritage is under resourced at all levels including research, planning, management and staffing.

- There is a lack of data, monitoring and research to adequately assess the state and trends of some natural heritage properties.

Broader comment on the management of Australia's heritage

- There is no effective Federal and State coordination in place to effect overall change for the better.

4.2   Geoheritage

Heritage State and Condition

Question: How strongly do you agree with the following statements about the state and trends of Australia's geoheritage heritage?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 17.

Statement	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)	Unsure/ Don't know/ No response
Significant progress has been made in the collection of data to facilitate statutory listing for geoheritage	1	9	2	3	2	(0)
The amount of listed geoheritage places has increased	0	8	4	4	0	(1)
There have been more systematic, thematic or regional geoheritage assessment projects	0	7	5	4	1	(0)
The majority of Australia's geoheritage places are in good condition and retain integrity of their identified values	0	4	4	7	2	(0)

Question: Do you have any further comment on the state and trends of Australia's geoheritage?

The comment (free text) provided in relation to this question is provided in Respondent Comment, below.

Pressures on Heritage

Question: What are the pressures which are having the greatest adverse impact on Australia's geoheritage?

The following table presents the collective respondent view of which pressures / threats are seen as having the greatest adverse impact on Australia's geoheritage. Respondents were asked to indicate which 5 pressures they believed have the greatest impact (at the present time). The figures in 'Degree of Impact' are cumulative totals, with each respondent selection having a value of 1. The higher the number, the greater the perceived impact of the pressure / threat.

Pressure / Threat	Degree of Impact (0 – low)
Climate Change: Rising temperatures	0
Climate Change: Changing rainfall	2
Climate Change: Rising sea level	2
Climate Change: Altered fire regimes	3
Climate Change: Extreme weather events	4
Industry: Industrial development	0
Industry: Industrial pollution	2
Industry: Resource extraction	6
Industry: Rural development - land clearing	5
Industry: Rural development - land use intensification and land use change	6
Industry: Tourism	5
Population: Population growth	6
Population: Population shift resulting in urban densification and renewal	0
Population: Population shift resulting in urban spread	1
Population: Service and infrastructure development (e.g., energy, water, transport, supply)	3
Population: Recreation and leisure activities	4
Population: Community perceptions of value	4
Governance: Inadequate protections (poor statutory controls and poor governance)	12
Governance: Inadequate realisation of community aspirations (relates to ownership, engagement, wellbeing)	3
Governance: Inadequate resourcing for heritage conservation/management	14
Other: Invasive species	0
Other: Human disasters (e.g., war, pandemics, infrastructure failure)	0
Other (please specify)	2 *

* 'Other' pressures identified: 1. A lack of value of the natural world. 2. Lack of expertise.

Question: How do you perceive the level of impact of the following pressures on Australia's geoheritage?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 17.

Statement	Very high impact (1)	High impact (2)	Low impact (3)	Very low impact (4)	No impact (5)	Unsure /Don't know /No response
Climate Change: Rising temperatures	1	6	5	1	1	(3)
Climate Change: Changing rainfall	3	5	5	1	1	(2)
Climate Change: Rising sea level	2	5	5	1	1	(3)
Climate Change: Altered fire regimes	2	10	0	2	1	(2)
Climate Change: Extreme weather events	5	7	2	2	0	(1)
Industry: Rural development & land clearance	5	8	3	0	0	(1)
Industry: Resource extraction	4	9	3	0	0	(1)
Industry: Secondary industry	1	5	8	0	1	(2)
Industry: Tourism	1	7	5	1	0	(3)
Population: Population growth	1	11	3	2	0	(0)
Population: Population shift	0	8	5	1	1	(2)
Population: Community use	0	8	3	2	1	(3)
Population: Community perceptions of value	8	5	2	3	0	(1)
Governance: Poor statutory controls and poor governance	7	9	1	0	0	(0)
Other: Invasive species	1	8	4	1	2	(1)
Other: Human disasters	1	2	8	1	3	(2)

Question: How do you perceive the level of impact of the above pressures (see previous question) on the following aspects of Australia's geoheritage?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 17.

Statement	Very high impact (1)	High impact (2)	Low impact (3)	Very low impact (4)	No impact (5)	Unsure /Don't know /No response
The survival (numbers) of protected of geoheritage places, areas, etc.	5	9	2	0	0	(1)
The integrity of geoheritage places, areas, etc.	6	8	2	0	0	(1)
Preservation of rare and representative geoheritage	7	8	1	0	0	(1)
Ability to recognise and protect setting, related places, objects, etc.	10	6	0	0	0	(1)

Heritage Management

Question: Which management actions are of highest priority to improve the protection of Australia's geoheritage?

The following table presents the collective respondent view of which management actions (i.e., those listed) are regarded as being of highest priority for the protection of Australia's geoheritage at the present time (2021). Respondents were asked to indicate which 5 actions they believed to be of highest priority. The figures in 'Level of Priority are cumulative totals, with each respondent selection having a value of 1. The higher the number, the greater the perceived priority.

Management Action	Level of Priority (0 – low)
Protection: Improved recognition, including at the statutory level, for the broad range of geoheritage	12
Protection: Improved heritage legislation	6
Protection: Improved planning provisions for heritage	4
Protection: Australia's ratification of international heritage related conventions, declarations, and other policies	3
Protection: Greater management planning for heritage places	3
Identification: Improved identification and assessment of geoheritage	7
Identification: Improved resourcing for the identification and assessment of geoheritage	6
Management: Improved government resourcing for the management and protection of geoheritage	4
Management: Improved structures, processes, and governance generally, in place to coordinate and manage geoheritage	5
Management: Improved risk assessment adaption/risk mitigation planning for new threats/risks	2
Management: Greater monitoring of the state/condition of geoheritage places	3
Management: Greater geoheritage management (including governance) evaluation	1
Management: Improved geoheritage management systems (including better cross-system standardisation)	1
Management: Greater leadership in heritage protection from government	7
Management: Maintenance and review of the Australian Heritage Strategy	1
Governance: Greater community participation in geoheritage management	2
Education: Improved training opportunities for heritage professionals	2
Education: Improved trades/traditional skills training opportunities	0
Education: Improved heritage education for the community	6
Presentation/Celebration: Improved presentation of geoheritage (including through the presentation of more places, improved heritage information and facilities)	7
Other (please specify)	1 *

* 'Other' priority actions identified: 1. Motherhood [statements] not enough. Deliberate staffing and expenditure on management are important.

Question: How strongly do you agree with the following statements about how well Australia's geoheritage is currently being managed?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 17.

Statement	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)	Unsure/ Don't know/ No response
Governance: The community has a satisfactory level of participation and voice in geoheritage management, including in decision making	0	1	1	9	6	(0)
Governance: The way in which Australia's geoheritage is managed and the existing level of protection contributes positively to community well-being	0	3	6	4	4	(0)
Identification: Australia's geoheritage is well understood and appropriately recognised	0	0	2	7	8	(0)
Identification: Adequate resources are available for the survey, identification and assessment of Australia's geoheritage places	0	1	2	5	9	(0)
Protection: Australia's geoheritage receives adequate protection through existing statutory controls	0	2	1	4	10	(0)
Protection: Appropriate management plans or other mechanisms are in place for the management of Australia's natural heritage places	0	2	4	6	5	(0)
Protection: Decisions regarding geoheritage places are well informed by an understanding of heritage values and relevant national and international principles and guidelines	0	3	4	5	5	(0)
Protection: Risks to geoheritage due to climate change are adequately understood and there is good preparedness through adaptation, risk management and/or sustainability planning where relevant	0	1	4	7	4	(1)

Protection: The use of international heritage related guidelines and policy strengthens the protection of Australia's geoheritage	0	7	5	4	1	(0)
Management: There are appropriate governance structures in place to coordinate and manage geoheritage in Australia	0	1	2	9	5	(0)
Management: There is adequate monitoring and evaluation of the health and management of Australia's geoheritage in place	0	1	1	6	9	(0)
Management: Management needs and processes are well understood and are well managed by those responsible for managing Australia's geoheritage places	0	1	7	5	4	(0)
Management: Adequate resources are available to support the management of Australia's geoheritage places	0	1	0	8	8	(0)
Presentation/celebration: geoheritage places in Australia are accessible, well presented and contribute to the community's sense of place	0	3	3	5	6	(0)

Respondent Comment

Comment on the state and trends of Australia's geoheritage

- The National Heritage List does not adequately represent or protect geoheritage.

- There does not appear to be an appetite for the listing of more geoheritage sites on the National Heritage List, [particularly] if there are any competing geological exploration or mining proposals. There are substantial delays (years) in the evaluation of potential sites. As a result, our standing in international geoheritage conservation is poor.

- There is no common Australia-wide database for geoheritage listed sites.

- Input to State and Federal geoheritage registers, involving the recording and describing of localities and their significance, is in the hands of a declining number of specialists, most of whom have many years of experience, but few are being replaced as they get too old or their health deteriorates. The majority are volunteers.

- Since the repeal of the Register of the National Estate, site conditions have degraded. There is a real danger of data being lost as few sites have been listed in State lists.

- [There is] no consistent strategy either at Federal or State levels to protect or even know the condition of geoheritage in vast areas of Australia.

- The topic is complex as the EBPC Act implies that it is predominantly 'biological', but [although] geoheritage of place is included, this is done poorly at the federal level. At state level there is a huge difference between the states; some doing significantly better than others. Victoria in particular is **very** poor and has almost no protection at all for [geoheritage] sites.

- Although there has been real progress over the past few years, geoheritage issues are less represented in studies and research. Because much of this is state based, it is also very patchy across Australia.

- With respect to caves and karst, I do not see any significant improvement in the protection of unique cave and karst features throughout Australia, [and] even less protection for significant karst areas throughout Australia.

- The majority of national parks throughout Australia and their state-based administrations pay scant regard to the geoheritage and geo-landscape attributes that underpin them and which are the very reason for the biota and land usage that arises from the geological story beneath and framing them.

- The trend is for State and Federal governments to fast track the planning and approval process for developments, and there has been a systematic reduction in resources to identify and protect sites of geoheritage significance.

- Destruction of geological heritage, as well as indigenous heritage, has been well publicised of late, as extraction of minerals and oil and gas overrides the heritage values.

- My remarks are focussed principally towards the state of conservation of karst geoheritage which should cover a broad range of disciplines. Protection of karst resources is, in my estimation, often deliberately inadequate at government level in order to avoid restricting the mining industry.

- There are no jobs, no training and no requirement for geoheritage to be considered in an EIS.

- Geoheritage and related areas (e.g., mining heritage), together with associated geotourism strategies and activities in Australia, lag behind better international standards and promotion. A major example is the good attention paid to World Heritage Areas in Australia versus the deliberate avoidance of the UNESCO Geopark program, to which Australia and New Zealand landscapes are admirably suited and [which] would generate significant international attraction (once regular visitation resumes after covid restrictions). Geoparks are not national parks or aimed at geologists. They are community driven investments about their own landscapes and stories and have great potential to put our geoheritage on display via geotrails, and other strategies to contribute to rural Australian development. They do not compete with national parks for funding. Geoheritage is the substance: Geotrails and Geoparks are the vehicles for their promotion and protection.

- Geoheritage also exists within major cities and is evidence of the actual reasons why such cities are founded and located where they are. These are geoheritage stories within large urban environments which deserve greater awareness as part of community pride, education and attraction for large populations who are much less aware of landscape attributes than their rural counterparts.

- Geoheritage alone is a series of outdoor museums - their stories need to bring them alive to the human population whom we want to value, protect and learnt about them.

Broader comment on the management of Australia's heritage

- There is no effective Federal and State coordination in place to effect overall change for the better.

- It seems to me that present government policy supports natural and cultural heritage with minimal resourcing, as long as it does not interfere with major development projects, especially mining.

4.3   Indigenous Heritage

Heritage State and Condition

Question: How strongly do you agree with the following statements about the state and trends of Australia's Indigenous heritage?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 24.

Statement	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)	Unsure/ Don't know/ No response
Significant progress has been made in the collection of data to facilitate statutory listing for Indigenous heritage	1	7	1	7	4	(4)
The amount of listed Indigenous heritage places has increased	2	11	2	3	1	(5)
There have been more systematic, thematic or regional Indigenous heritage assessment projects	1	8	6	1	4	(4)
The majority of Australia's Indigenous heritage places are in good condition and retain integrity of their identified values	1	1	3	10	6	(3)

Question: Do you have any further comment on the state and trends of Australia's Indigenous heritage?

The comment (free text) provided in relation to this question is provided in Respondent Comment, below.

Pressures on Heritage

Question: What are the pressures which are having the greatest adverse impact on Australia's Indigenous heritage?

The following table presents the collective respondent view of which pressures / threats are seen as having the greatest adverse impact on Australia's Indigenous heritage. Respondents were asked to indicate which 5 pressures they believed have the greatest impact (at the present time). The figures in 'Degree of Impact' are cumulative totals, with each respondent selection having a value of 1. The higher the number, the greater the perceived impact of the pressure / threat.

Pressure / Threat	Degree of Impact (0 – low)
Climate Change: Rising temperatures	5
Climate Change: Changing rainfall	1
Climate Change: Rising sea level	5
Climate Change: Altered fire regimes	5
Climate Change: Extreme weather events	4
Industry: Industrial development	5
Industry: Industrial pollution	0
Industry: Resource extraction	13
Industry: Rural development - land clearing	10
Industry: Rural development - land use intensification and land use change	1
Industry: Tourism	1
Population: Population growth	2
Population: Population shift resulting in urban densification and renewal	3
Population: Population shift resulting in urban spread	3
Population: Service and infrastructure development (e.g., energy, water, transport, supply)	2
Population: Recreation and leisure activities	0
Population: Community perceptions of value	6
Governance: Inadequate protections (poor statutory controls and poor governance)	12
Governance: Inadequate realisation of community aspirations (relates to ownership, engagement, wellbeing)	9
Governance: Inadequate resourcing for heritage conservation/management	15
Other: Invasive species	1
Other: Human disasters (e.g., war, pandemics, infrastructure failure)	1
Other (please specify)	3 *

* 'Other' priority actions identified: 1. Commonwealth leadership. 2. Disconnection from Country. 3. Early death of knowledge
holders & loss of their knowledge through lack of documentation.

Question: How do you perceive the level of impact of the following pressures on Australia's Indigenous heritage?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 24.

Statement	Very high impact (1)	High impact (2)	Low impact (3)	Very low impact (4)	No impact (5)	Unsure /Don't know /No response
Climate Change: Rising temperatures	7	7	5	0	0	(5)
Climate Change: Changing rainfall	5	10	5	0	0	(4)
Climate Change: Rising sea level	7	8	6	0	0	(3)
Climate Change: Altered fire regimes	8	11	1	0	0	(4)
Climate Change: Extreme weather events	7	11	2	0	0	(4)
Industry: Rural development & land clearance	12	9	0	0	0	(3)
Industry: Resource extraction	19	2	0	0	0	(3)
Industry: Secondary industry	4	11	3	1	0	(5)
Industry: Tourism	5	10	4	0	0	(5)
Population: Population growth	5	8	6	0	0	(5)
Population: Population shift	3	12	5	0	0	(4)
Population: Community use	1	10	6	1	0	(6)
Population: Community perceptions of value	7	10	5	0	0	(2)
Governance: Poor statutory controls and poor governance	16	5	0	0	0	(3)
Other: Invasive species	5	12	2	1	0	(4)
Other: Human disasters	3	7	8	1	0	(5)

Question: How do you perceive the level of impact of the above pressures (see previous question) on the following aspects of Australia's Indigenous heritage?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 24.

Statement	Very high impact (1)	High impact (2)	Low impact (3)	Very low impact (4)	No impact (5)	Unsure /Don't know /No response
The survival of protected Indigenous heritage	16	4	1	0	0	(3)
The integrity of Indigenous heritage	18	4	0	0	0	(2)
Preservation of rare and representative Indigenous heritage	15	5	0	0	0	(4)
Ability to recognise and protect setting, related places, objects, etc.	18	3	0	0	0	(3)

Heritage Management

Question: Which management actions are of highest priority to improve the protection of Australia's Indigenous heritage?

The following table presents the collective respondent view of which management actions (i.e., those listed) are regarded as being of highest priority for the protection of Australia's Indigenous heritage at the present time (2021). Respondents were asked to indicate which 5 actions they believed to be of highest priority. The figures in 'Level of Priority' are cumulative totals, with each respondent selection having a value of 1. The higher the number, the greater the perceived priority.

Management Action	Level of Priority (0 – low)
Protection: Improved recognition, including at the statutory level, for the broad range of Indigenous heritage (including intangible heritage and moving beyond land based only heritage).	12
Protection: Improved heritage legislation	14
Protection: Improved planning provisions for heritage	3
Protection: Australia's ratification of international heritage related conventions, declarations, and other policies	1
Protection: Greater management planning for heritage places	4
Identification: Improved identification and assessment of Indigenous heritage	4
Identification: Improved resourcing for the identification and assessment of Indigenous heritage	8
Management: Improved government resourcing for the management and protection of Indigenous heritage	9
Management: Improved structures, processes, and governance generally, in place to coordinate and manage Indigenous heritage	3
Management: Improved risk assessment adaption/risk mitigation planning for new threats/risks	1
Management: Greater monitoring of the state/condition of Indigenous heritage places	3
Management: Greater Indigenous heritage management (including governance) evaluation	2
Management: Improved Indigenous heritage management systems (including better cross-system standardisation)	5
Management: Greater leadership in heritage protection from government	5
Management: Maintenance and review of the Australian Heritage Strategy	1
Governance: Greater Indigenous participation and authority in decision making about the management of Indigenous heritage	18
Governance: Greater access by Indigenous people to sites and traditional resources, land and seas	9
Education: Improved training opportunities for heritage professionals	0
Education: Improved trades/traditional skills training opportunities	0

Education: Improved heritage education for the community	3
Presentation/Celebration: Improved presentation of Indigenous heritage (including through the presentation of more places, improved heritage information and facilities)	3
Other (please specify)	1 *

* 'Other' priority actions identified: 1. Commonwealth leadership.

Question: How strongly do you agree with the following statements about how well Australia's Indigenous heritage is currently being managed?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 24.

Statement	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)	Unsure/ Don't know/ No response
Governance: Indigenous people have a high level of participation and voice in decision making about Indigenous heritage	0	3	1	4	13	(3)
Governance: Indigenous people have good access to Indigenous sites and traditional resources, land and seas	2	2	2	5	11	(2)
Identification: Australia's Indigenous heritage is well understood and appropriately recognised	1	1	0	9	11	(2)
Identification: Adequate resources are available for the survey, identification and assessment of Australia's Indigenous heritage places	1	1	2	4	14	(2)
Protection: Australia's Indigenous heritage receives adequate protection through existing statutory controls	0	1	2	3	13	(5)
Protection: Appropriate management plans or other mechanisms are in place for the management of Australia's Indigenous heritage places	1	2	1	5	12	(2)
Protection: Decisions regarding Indigenous heritage places are well informed by an understanding of heritage values and relevant national and international principles and guidelines (including the Burra Charter)	0	2	4	3	10	(5)

Protection: Risks to Indigenous heritage due to climate change are adequately understood and there is good preparedness through adaptation, risk management and/or sustainability planning where relevant	1	0	3	6	12	(2)
Protection: The use of international heritage related guidelines and policy strengthens the protection of Australia's Indigenous heritage	3	6	6	2	3	(4)
Management: There are appropriate governance structures in place to coordinate and manage Indigenous heritage in Australia	0	1	2	7	11	(3)
Management: There is adequate monitoring and evaluation of the health and management of Australia's Indigenous heritage in place	0	0	3	2	15	(4)
Management: Management needs and processes are well understood and are well managed by those responsible for managing Australia's Indigenous heritage places	0	1	4	6	10	(3)
Management: Adequate resources are available to support the management of Australia's historic Indigenous places	0	0	2	2	16	(4)
Presentation/celebration: Indigenous heritage places in Australia are accessible, well presented and contribute to the community's sense of place	0	2	3	7	9	(3)

Respondent Comment

Comment on the state and trends of Australia's Indigenous heritage

- Indigenous heritage is still largely undervalued, and in states such as WA the whole system is aimed at facilitating land use rather than the actual conservation and maintenance of Indigenous heritage.

- The broader Australian community fails to acknowledge and recognise the significance of Indigenous heritage, and ignorance and unconscious bias prevent proper protection.

- I believe we sit so low in importance that Indigenous heritage is almost irrelevant to a lot of people. It has been highlighted lately, but for how long?

- The Australian story the National Heritage List represents is that of a white European culture. The priority of protecting Indigenous Heritage has not been realised at all.

- The benefits of listing are not widely understood by Indigenous communities and there is a lack of awareness about the process.

- The collection of [data] continues to not sufficiently engage with, or involve, Aboriginal people. It is a rights issue that Aboriginal people control such work.

- Sadly, Indigenous heritage is assessed in the same way that we assess all heritage values – with identification of sites/values and then bench-marking this site/value against other similar sites. For example, a rock art site - is this the best rock art site, most extensive rock art site, oldest rock art site? We neglect to include the intrinsic value of the heritage [rock art site] to the Indigenous community themselves. What does it mean to them in terms of their ongoing connection to their ancestors or this place, what stories are held in the rock art and what is the significance to this Indigenous community? Benchmarking was not practised by Indigenous communities or between nations. We need to provide better recognition and protection of Indigenous heritage for Indigenous Australians (and for all Australians as we reconcile our Indigenous and non-Indigenous histories) instead of applying a colonial/top-down assessment of value.

- While progress has been made over the long period I have been involved, most state and national legislation is inadequate and does not satisfactorily protect Aboriginal and Torres Strait Islander tangible or intangible heritage

- Indigenous heritage places are threatened by lack of adequate legislation and no co-ordinated national approach.

- Management, listing and protection of Indigenous heritage is undermined by inconsistent and inadequate heritage legislation.

- Too much tokenism, broken promises; and state governments, in particular, never actively administering legislation or adequately investigating and prosecuting offences. Industry, despite Juukan Gorge, can, and still does, get away with practically anything in terms of ignoring or damaging significant cultural heritage with impunity.

- In Victoria, Indigenous heritage surveys are focused on responding to development proposals. The outcome is that surveys result in "site clearance/salvage", not recognition and protection. This is disastrous.

- Heritage agencies are under increasing pressure due to under-resourcing and the pace of proponent-led development. Several notable high-profile cases of failures in self-assessment duty of care in Indigenous heritage demonstrates how vulnerable the system is without government regulatory oversight.

- The effect of climate change, for example in relation to the many rich Aboriginal midden sites on Australia's long coastline (through sea-level rise), and upon cultural trees (through higher risk of intense wildfires), merits detailed research and increased application of resilience-building strategies. Aboriginal custodians must have a strong voice in strategies to monitor and manage climate change impacts upon their cultural places and landscapes.

- The impact of tourism on Indigenous heritage is low when done by our people who are 'true', but high when done by 'wrong' people, Indigenous and non-Indigenous.

- Indigenous people are not empowered in some jurisdictions as they only have advisory status.

- The funding of Aboriginal groups at the local property level is required to ensure that an overall view for management is understood and Aboriginal heritage is also placed at a higher level, rather than just [being] another stakeholder.

- There is a general lack of consistency and minimum standards in recording and regulation that needs urgent fixing – greater regulation both of industry and government [is needed].

- Funding of Indigenous data collection needs to be greatly increased.

- Far more needs to be done to facilitate the recovery, teaching, understanding, appreciation and promotion of Australia's Indigenous languages and cultural heritage, both tangible and intangible.

Broader comment on the management of Australia's heritage

- A key issue for me is the adoption of rights-based approaches that enable Aboriginal people to manage and care for heritage (not just so-called 'Indigenous heritage'), and that fields such as archaeology, history and architecture, which remain deeply structurally racist at heart, make substantive change in their work methods and approaches. I think this will only be achieved through recognition of sovereignty and treaties.

- Heritage is interconnected: the divisions between 'historic' 'Indigenous' 'natural' and 'geoheritage' are a colonial construct.

- Australian cultural heritage, especially Indigenous, is highly endangered and every day is a battle for more effective management and less thoughtless destruction. The battle is fuelled both by greed and indifference - that is the view from the front line.

- It's hard to know where to start. There are unquestionably lots of people, Indigenous and non-Indigenous, working in good faith to protect and celebrate Aboriginal and Torres Strait Islander heritage, tangible and intangible. However, a lack of meaningful government support at all levels, local to federal and from both political persuasions, has seen long-term de-funding and other undermining of heritage protection broadly (i.e., natural and cultural, Indigenous and non-Indigenous). Current prime examples include the Federal Government's determination not to properly implement Graeme Samuel's review of the EPBC Act, or the WA State Government's duplicitous anti-heritage, anti-Indigenous approach to rewriting its inadequate 1972 Aboriginal Heritage Act.

- Cultural heritage needs to become part of the educational syllabus of primary, secondary and tertiary institutions. Information on cultural heritage should be made exciting and engaging, and be readily and easily accessible on the internet.

- More understandings need to be fostered to link Australia's First People's heritage to those of South and Central Asia and Africa. Early migrations, navigational histories , archaeological and rock art histories both in Australia and these regions, should be given focus in this context. The histories of the trans-cultural collaborations of Australian South Sea Islander and Indigenous Australians needs to be more closely studied, documented, celebrated and promoted.

- The previous SOE felt more like an analysis of the environment, rather than heritage. With stronger Indigenous leadership, I suspect this will be a very different report and I look forward to the results.

- The previous SOE was very broad in its findings in relation to Indigenous heritage. No actions resulted, that I am aware of, in relation to the findings.

4.4   Historic Heritage

Heritage State and Condition

Question: How strongly do you agree with the following statements about the state and trends of Australia's historic heritage?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 20.

Statement	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)	Unsure/ Don't know/ No response
Significant progress has been made in the collection of data to facilitate statutory listing for historic heritage	1	9	4	3	3	(0)
The amount of listed historic heritage places has increased	1	13	3	0	2	(1)
There have been more systematic, thematic or regional historic heritage assessment projects	2	7	7	2	2	(0)
The majority of Australia's historic heritage places are in good condition and retain integrity of their identified values	0	3	4	11	2	(0)

Question: Do you have any further comment on the state and trends of Australia's historic heritage?

The comment (free text) provided in relation to this question is provided in Respondent Comment, below.

Pressures on Heritage

Question: What are the pressures which are having the greatest adverse impact on Australia's historic heritage?

The following table presents the collective respondent view of which pressures / threats are seen as having the greatest adverse impact on Australia's historic heritage. Respondents were asked to indicate which 5 pressures they believed have the greatest impact (at the present time). The figures in 'Degree of Impact' are cumulative totals, with each respondent selection having a value of 1. The higher the number, the greater the perceived impact of the pressure / threat.

Pressure / Threat	Degree of Impact (0 – low)
Climate Change: Rising temperatures	2
Climate Change: Changing rainfall	0
Climate Change: Rising sea level	2
Climate Change: Altered fire regimes	5
Climate Change: Extreme weather events	14
Industry: Industrial development	6
Industry: Industrial pollution	0
Industry: Resource extraction	2
Industry: Rural development - land clearing	3
Industry: Rural development - land use intensification and land use change	5
Industry: Tourism	1
Population: Population growth	1
Population: Population shift resulting in urban densification and renewal	7
Population: Population shift resulting in urban spread	6
Population: Service and infrastructure development (e.g., energy, water, transport, supply)	2
Population: Recreation and leisure activities	0
Population: Community perceptions of value	7
Governance: Inadequate protections (poor statutory controls and poor governance)	10
Governance: Inadequate realisation of community aspirations (relates to ownership, engagement, wellbeing)	5
Governance: Inadequate resourcing for heritage conservation/management	17
Other: Invasive species	0
Other: Human disasters (e.g., war, pandemics, infrastructure failure)	0
Other (please specify)	4 *

* 'Other' pressures/threats identified: 1. Lack of appropriate qualifications of the personnel involved in the heritage referrals for consent authorities at all government levels. 2. Developers have lobbied to water down development controls. 3. Inadequate incentives for private owners. 4. Owners (particularly rural) not understanding the value of what they have.

Question: How do you perceive the level of impact of the following pressures on Australia's historic heritage?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 20.

Statement	Very high impact (1)	High impact (2)	Low impact (3)	Very low impact (4)	No impact (5)	Unsure /Don't know /No response
Climate Change: Rising temperatures	1	10	6	2	0	(1)
Climate Change: Changing rainfall	1	11	6	1	0	(1)
Climate Change: Rising sea level	2	8	6	1	1	(2)
Climate Change: Altered fire regimes	4	10	3	1	0	(2)
Climate Change: Extreme weather events	7	10	2	1	0	(0)
Industry: Rural development and land clearance	3	12	4	0	0	(1)
Industry: Resource extraction	6	6	7	0	0	(1)
Industry: Secondary industry	0	6	10	1	0	(3)
Industry: Tourism	1	5	8	4	0	(2)
Population: Population growth	1	9	9	0	0	(1)
Population: Population shift	3	8	7	0	0	(2)
Population: Community use	0	1	10	4	1	(4)
Population: Community perceptions of value	3	6	8	2	0	(3)
Governance: Poor statutory controls and poor governance	8	10	1	1	0	(0)
Other: Invasive species	1	6	8	2	2	(4)
Other: Human disasters	0	5	6	2	1	(6)

Question: How do you perceive the level of impact of the above pressures (see previous question) on the following aspects of Australia's historic heritage?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 20.

Statement	Very high impact (1)	High impact (2)	Low impact (3)	Very low impact (4)	No impact (5)	Unsure/ Don't know/ No response
The survival (numbers) of protected of historic heritage places, areas, etc.	7	11	1	0	0	(1)
The integrity of historic heritage places, areas, etc.	8	12	0	0	0	(0)
Preservation of rare and representative historic heritage	8	11	1	0	0	(0)
Ability to recognise and protect setting, related places, objects, etc.	7	10	3	0	0	(0)

Heritage Management

Question: Which management actions are of highest priority to improve the protection of Australia's historic heritage?

The following table presents the collective respondent view of which management actions (i.e., those listed) are regarded as being of highest priority for the protection of Australia's historic heritage at the present time (2021). Respondents were asked to indicate which 5 actions they believed to be of highest priority. The figures in 'Level of Priority' are cumulative totals, with each respondent selection having a value of 1. The higher the number, the greater the perceived priority.

Management Action	Level of Priority (0 – low)
Protection: Improved recognition, including at the statutory level, for the broad range of historic heritage (including intangible heritage and moving beyond land based only heritage)	10
Protection: Improved heritage legislation	6
Protection: Improved planning provisions for heritage	10
Protection: Australia's ratification of international heritage related conventions, declarations, and other policies	3
Protection: Greater management planning for heritage places	5
Identification: Improved identification and assessment of historic heritage	6
Identification: Improved resourcing for the identification and assessment of historic heritage	7
Management: Improved government resourcing for the management and protection of historic heritage	13
Management: Improved structures, processes, and governance generally, in place to coordinate and manage historic heritage	5
Management: Improved risk assessment adaption/risk mitigation planning for new threats/risks	5
Management: Greater monitoring of the state/condition of historic heritage places	6
Management: Greater historic heritage management (including governance) evaluation	0
Management: Improved historic heritage management systems (including better cross-system standardisation)	1
Management: Greater leadership in heritage protection from government	6
Management: Maintenance and review of the Australian Heritage Strategy	1
Governance: Greater community participation in historic heritage management	3
Education: Improved training opportunities for heritage professionals	2
Education: Improved trades/traditional skills training opportunities	3
Education: Improved heritage education for the community	1
Presentation/Celebration: Improved presentation of historic heritage (including through the presentation of more places, improved heritage information and facilities)	3
Other (please specify)	4 *

* 'Other' priority actions identified: 1. All of the above. 2. Commonwealth leadership. 3. Government and other (e.g., Lottery West, tax incentives) funding for heritage conservation. 4. This 'other' item comprised 7 detailed comments on specific management approaches, hence has been included in Respondent Comment, below, and in one case in Section 4.5, rather than here.

Question: How strongly do you agree with the following statements about how well Australia's historic heritage is currently being managed?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of possible responses per statement is 20.

Statement	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)	Unsure/ Don't know/ No response
Governance: The community has a satisfactory level of participation and voice in historic heritage management, including in decision making	0	5	2	9	3	(1)
Governance: The way in which Australia's historic heritage is managed and the existing level of protection contributes positively to community well-being	1	7	7	2	2	(1)
Identification: Australia's historic heritage is well understood and appropriately recognised	0	4	5	6	5	(0)
Identification: Adequate resources are available for the survey, identification and assessment of Australia's historic heritage places	1	1	3	7	8	(0)
Protection: Australia's historic heritage receives adequate protection through existing statutory controls	1	2	3	7	7	(0)
Protection: Appropriate management plans or other mechanisms are in place for the management of Australia's historic heritage places	0	2	4	8	6	(0)
Protection: Decisions regarding historic heritage places are well informed by an understanding of heritage values and relevant national and international principles and guidelines (including the Burra Charter)	0	6	4	5	5	(0)

Protection: Risks to historic heritage due to climate change are adequately understood and there is good preparedness through adaptation, risk management and/or sustainability planning where relevant	0	2	1	11	6	(0)
Protection: The use of international heritage related guidelines and policy strengthens the protection of Australia's historic heritage	2	7	6	2	2	(1)
Management: There are appropriate governance structures in place to coordinate and manage historic heritage in Australia	0	6	5	5	4	(0)
Management: There is adequate monitoring and evaluation of the health and management of Australia's historic heritage in place	0	1	2	10	7	(0)
Management: Management needs and processes are well understood and are well managed by those responsible for managing Australia's historic heritage places	0	4	5	8	3	(0)
Management: Adequate resources are available to support the management of Australia's historic heritage places	1	1	1	6	11	(0)
Presentation/celebration: Historic heritage places in Australia are accessible, well presented and contribute to the community's sense of place	0	7	8	4	1	(0)

Respondent Comment

Comment on the state and trends of Australia's historic heritage

- The 'majority' of places are in good condition, but many important places are in poor condition or deteriorating.

- Without any data it is hard to quantify whether the majority of Australia's historic heritage places are in good condition or not.

- It is extremely difficult to generalise across so many listed heritage places (in NSW some 1,500 State Heritage Register listed places, >10,000 places listed on local environmental plans).

- Although there have been more heritage studies and positive approaches towards the identification of places with potential heritage values, this has not been carried out as comprehensively as it should have been for protection of identified places on statutory instruments.

- There is scope for additional focus upon heritage places and objects that relate to: 1. The stories of Aboriginal peoples in Australia after European settlement; and 2. The stories of Australia's multicultural communities.

- Greater funding is required for strategic work in identifying and protecting industrial sites, particularly those of the Post-war period, and later twentieth century.

SoE 2021 Heritage Supplementary Report 4: Heritage Expert Survey Approach and Results (McConnell, March 2022)

- There do not appear to be any strategic/typological/thematic studies being undertaken at the state level in Victoria. This has been the case for at least the past 5 years, and I am aware of only one over this period.

- Government appetite for protecting heritage is waning.

- Since the glorious 1980s when heritage and its conservation was raised to prominence and lots of very valuable work was done then to raise awareness, list and protect it, heritage has gradually been relegated to secondary relevance and increasingly marginalised despite the adoption of the legislative framework for its formal recognition and protection.

- Heritage assessment and management has gone backwards.

- Use of appropriately qualified heritage specialists based on the nature and type of the place will need to be improved for adequate identification and assessment that would lead to their protection under statutory instruments.

- Australia's historic heritage (and integrated natural and cultural heritage values) is under-valued, under-represented, [and under] identified and assessed at all governmental levels and in all jurisdictions.

- There is less appreciation for the role of historic heritage in building community well being.

- There is less appreciation for best practice heritage conservation.

- Ensure there is a Heritage Quality Framework to guide appropriate work to heritage sites and prevent threats to heritage through inappropriate responses.

- There appears to be little strategic work taking place at the state level [in Victoria], although a lot at local government level in Victoria.

- Needs more funding, particularly in Tasmania

- It is common to prioritise big development projects over historic heritage.

- Pressure for development, particularly in the Melbourne CBD, has resulted in heritage sites being overwhelmed; there has been a new acceptance of facadism; and a recent development of approval of multi-storey towers cantilevering over heritage sites.

- I think education and improved skills/resources at all levels – including consultants in the field, as well as the government personnel, together with collaborations and ongoing communication (respecting rights) between the stakeholders, is critical in the adequate management, identification and protection of Australia's historic heritage places. A place could be important for one community, but may not be appreciated by another community who live in the place, therefore understanding of the heritage values of each layer of historic heritage through education is one of the key considerations.

Broader comment on the management of Australia's heritage

- Development of strong legislation, protection and management processes that actually protect Indigenous heritage, and set timelines for this, is recommended.

- Climate vulnerability and risk management needs to be assessed for all heritage sites - World Heritage to local heritage. Risks, arising from the increased number and intensity of bushfire and storm events, drought, humidity and temperature changes, all impact flora, fauna, cultural landscapes and settings and need to be assessed and managed. Conservation planning and management processes need to include these processes to address and mitigate the risks where possible. Heritage professionals, site managers and carers need to understand their role in climate action and take responsibility for climate change planning, policy, adaptation, mitigation and interpretation in their heritage work. This needs to be both encouraged and required by federal, state and local government. Recent assessment and management methods such as the Climate Vulnerability Index (CVI) – a tool to rapidly assess climate change risk to World Heritage and other heritage properties, is a valuable tool for ongoing heritage and

conservation management planning and could be applied to all types of heritage sites, not only World Heritage sites (see https://cvi-heritage.org/).

- Risk assessment of climate change impacts with recommendations for mitigation strategies to be implemented to protect and improve the resilience of cultural, Indigenous and natural heritage sites of all types, ranging from local to World Heritage, is recommended. Ensure all levels of government are supported by the Commonwealth government, unified in their approach, committed to the outcomes and pushing this for all natural, cultural and Indigenous heritage values and places.

- The importance of including heritage in Commonwealth, state and local disaster risk management and climate change adaptation policies and plans as a means of ensuring that natural and cultural heritage survive for future generations to benefit from and enjoy needs to be promoted. Heritage managers and managing authorities, including State, Territory and Commonwealth agencies, are not adequately encouraging the assessment of impacts from climate change or other disaster threats, and how these are pre-emptively factored into management of heritage values (cultural and natural). ICOMOS's [2019] *The Future of Our Pasts: engaging cultural heritage in climate action* provides a road map of issues to be considered and possible climate change mitigation routes. *A Guide to Climate Change Impacts* has been prepared by Historic Environment Scotland to help owners and carers of historic sites take action to protect them from climate change. This sort of guideline document should be prepared in Australia at Commonwealth level.

- The recognition and management of cultural and natural heritage is largely missing from Australia's response to the Sustainable Development Goals (SDGs). It should be recognised that cultural heritage has significant sustainability benefits, including opportunities for sustainable re-use and the embedded carbon they contain, contributing to a reduction of Australia's carbon emissions. Management and conservation of heritage values and places needs to be positioned as a key component of the Commonwealth Government's leadership for sustainable development, and this approach embedded in the context of the Sustainable Development Goals, as adopted by the UN member states in 2015. Position heritage conservation as a key component of sustainable development and embed it within the context of the Sustainable Development Goals adopted by the UN member states in 2015. Clear aims need to be developed in relation to risk management and climate change action for heritage authorities and managers – Commonwealth, State, Territory and private.

4.5 Comment on the Australian Heritage Strategy

The following responses were provided in relation to 2 questions in the Heritage Expert Survey that asked respondents for their views on Australian Heritage Strategy and its implementation.

Question: It is now 5 years after the implementation of the Australian Heritage Strategy. How strongly do you agree with the following statements about the contribution the Australian Heritage Strategy has made to the protection and management of Australia's heritage?

The following is the tabulated result from the above question. The figures show the number of responses (frequency of response) for each category of response. The total number of responses possible per statement is 71.

Statement	By expert type	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)	Unsure/ Don't know/ No response
The Australian Heritage Strategy has made a significant positive contribution to the protection and management of Australia's historic heritage	NH	0	6	6	1	1	nd
	GH	0	1	6	5	1	nd
	IH	0	2	6	5	1	nd
	HH	0	4	4	4	4	nd
	total	0	13	22	16	7	(13)
Good progress has been made in implementing the Australian Heritage Strategy	NH	0	5	6	2	1	nd
	GH	0	1	4	6	1	nd
	IH	0	2	4	6	0	nd
	HH	0	2	8	3	3	nd
	total	0	10	22	17	5	(17)

Notes: The 'expert types' are as follow: NH – natural heritage (general); GH – Geoheritage; IH – Indigenous heritage; HH – Historic heritage. 'nd' – no data.

Respondent Comment

The following is the respondent comment provided in response to the question 'How could the Australian Heritage Strategy be improved?'. The comment is the collective response for all heritage types (sorting by heritage type was not considered relevant for this question).

Awareness of the Australian Heritage Strategy improvements

- Raising the profile of the AHS and its importance in the Nation's history.

- Greater community and institutional awareness of this strategy is needed.

- More heritage consultants/practitioners, as well as levels of government, need to be aware of its existence.

- Despite 20 years as a [heritage] practitioner I had never heard of this strategy before this survey. Need for publicity and education [and improved consultation] is clearly urgent.

- I never knew it existed, let alone natural and geological value land managers.

Resourcing, leadership and other governance improvements

- The Australian Heritage Strategy can only be successful with government commitment, leadership and appropriate resourcing.

- Adequate resourcing.

- The strategy needs to be supported by appropriate resourcing.

- The Australian Heritage Strategy (and associated departmental staff) need adequate resourcing to be able to better focus and fulfil its charter.

- Funding resources and a governance structure to implement the Strategy.

- Like many areas in Australia we are Strategy-rich, but implementation-poor. A good start would be appropriately resourcing its implementation.

- The Strategy sets out some good outcomes, objectives and actions. Setting deliverable timeframes and resourcing actions would assist implementation.

- The Australian Heritage Strategy needs to be updated, and the delivery of outcomes enhanced so that [heritage] does not always come last after economic and political imperatives.

- For government at all levels to take [the Australian Heritage Strategy] seriously and resource its implementation properly.

- Should be resourced and implementation monitored with input from stakeholders.

- The Australian Heritage Strategy could be improved by having a well-resourced implementation plan with key performance indicators that can be measured to demonstrate progress. The current plan is not being sufficiently driven nor supported/resourced by the Australian Government, so actions are progressing too slowly to appropriately protect, manage or celebrate (transmit) Australia's Heritage.

- The Strategy is in principle well-structured and comprehensive, but its implementation is sadly lacking.

- The Strategy is gathering dust and implementation does not have the leadership needed for effective improvements.

- Commonwealth commitment and leadership.

- National leadership and genuine understanding of heritage values and heritage places for future generations.

- Need a more coordinated federal-state approach.

- It works at a national level, but state level management has not worked.

- Increased awareness and implementation by [government] agencies (e.g., Defence).

- There should be more collaborations with relevant peak heritage bodies such as Australia ICOMOS to monitor and identify areas of focus as well as measurements and monitoring systems for the progress of the identified actions and outcomes.

- More rapid/forced implementation at local level (e.g., most Tasmanian [local government] councils still don't even have a local heritage register).

General approach and content improvements

- Rewrite it from the grassroots. Build a national perspective and strategy through local and state involvement. Give it teeth. Make the actions targeted and strong.

- Position heritage conservation as a key aspect of sustainable development in the context of the Sustainable Development Goals.

- Position heritage conservation as a key component of sustainable development and embed it within the context of the Sustainable Development Goals adopted by the UN member states in 2015.

- Strategies for population reduction to significantly reduce the impacts of climate change.

- The Australian Heritage Strategy will only be successful if it is kept abreast of, and mitigates, climate change risks to heritage sites.

- Progress the Australian Heritage Strategy with steps and milestones and funding to ensure there is action. Ensure the objectives include clear outcomes, recommendations and actions for implementation, with set and prioritised timelines for the development of strong, useful and consistent heritage and environment legislation across all levels of government, including for the protection and management of Indigenous heritage.

- There could be a separate actions and outcomes document that can be changed and amended as the actions/outcomes are achieved and when new activities need to be added as they become known for the protection of Australia's historic heritage. The Australian Heritage Strategy then could be an overarching guiding document and wouldn't need to be updated regularly.

- Develop clear aims in relation to risk management and climate change action for heritage authorities and managers [of] Commonwealth, State, Territory and private [heritage]. Promote the importance of including heritage in Commonwealth, state and local disaster risk management and climate change adaptation policies and plans as a means of ensuring that natural and cultural heritage survive for future generations to benefit from and enjoy.

- The information base needs to be updated, particularly now that the impacts of climate change upon heritage places, particularly the Great Barrier Reef, are becoming very clear. An obvious area needing national focus is the building of resilience of cultural and natural heritage places, and strong investment in management planning is critical. The ability to understand the impacts of climate change and other factors depends upon systematic monitoring. Condition-monitoring of heritage places is rarely systematic in Australia, often due to the cost. Investment and research into new lower-cost monitoring technologies would be a valuable step.

- Better recognition of the rights of Indigenous people and the implementation of those rights.

- Recommend and set timelines for development of strong legislation, protection and management processes that actually protect Indigenous heritage.

- The urgent need to fund and reinstate a national Aboriginal body (such as AWHIN, i.e., the Australian World Heritage Indigenous Network) to work with all World Heritage properties and all levels of government, dealing with the issues at both the local community level and making sure the government, both state and Federal, understand those community needs and demands.

- Provision of more funding by government: To educate local communities about the value of their, and other, national heritage assets (tangible and intangible). To improve government legislation at all levels to empower authoritative Indigenous participation in all government decisions in respect to granting development of tangible and intangible heritage assets on Indigenous lands.

- There is a big opportunity to facilitate increased involvement of Aboriginal and Torres Strait Islander traditional custodians in the monitoring of the condition of important cultural and heritage sites on their country.

- The Australian Heritage Quality Framework should have been included.

- Better recognition of scientific and industrial heritage and not simply buildings where they occur.

- Better legislative protection and enforcement for heritage areas and sites.

- Strategic delivery to maximise biodiversity outcomes.

- This is difficult to answer as there is so much that needs to be done. The main issue is that the natural heritage aspects have concentrated on biological matters, and earth science heritage has been too often ignored or just done as an "add on" and not done to the same extent, i.e., uneven distribution of what are probably already inadequate resources.

5   Acknowledgements

The Heritage Expert Survey would not have been possible without the participation of heritage experts. I am therefore extremely grateful to all those Australian heritage experts who made time to participate in the survey.

I am also grateful the Department of Agriculture, Water and the Environment Heritage Branch and SoE Team members, in particular Roger Morrison, for reviewing the draft on-line survey to ensure it met SoE 2021 requirements, and for assistance in distributing government-related invitations to participate in the survey. My thanks are also due to the organisations invited to participate in the survey for passing on the invitations on to relevant members.

I would also like to thank to Richard Mackay, author of the SoE 2011 and 2016 Heritage reports, for providing me with information on the 2016 SoE heritage expert survey. This greatly assisted the development of the 2021 Heritage Expert Survey.

I would particularly like to acknowledge and thank Ella Horton, who provided invaluable technical assistance in developing the survey, including with respect to the survey structure, question format, putting it on-line; and with assistance in recovering the response data from the on-line platform.

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Appendix 1 –Heritage Expert Survey On-line User Information and Questions

SOE HERITAGE THEME DATA COLLECTION

– HERITAGE EXPERT SURVEY

Introductory Explanatory Note

SoE 2021 Heritage Theme Expert Survey

What is the SoE 2021?

Under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), the Minister for the Environment is required to table a report in Parliament every five years on the state of the Australian environment. The 2021 State of the Environment Report (SoE 2021) will build on data and information published in SoE 2016 and previously. The SoE 2021 is due for completion and release in late 2021.

The SoE report assesses the current state of the Australian environment across a range of disciplinary 'themes' (including heritage) and explores how the environment is changing over time. It also reports on emerging and future environmental matters. It is a source of independent and credible information and data at national and regional scales and is compiled by independent experts.

How is Heritage Defined for the SoE 2021?

The EPBC Act specifically includes the 'heritage values of places' as part of the 'environment'. Heritage values are defined as including the place's natural and cultural environment having aesthetic, historic, scientific or social significance, or other significance, for current and future generations of Australians.

In SoE 2021 heritage is taken to be places, areas and intangible heritage whose values can be identified and which have been (or should be) formally identified and managed for conservation purposes. Cultural heritage might include intangible aspects such as traditional practices, knowledge and skills; and tangible aspects such as historically important locations, objects, archaeological sites, buildings, precincts and cultural landscapes. Natural heritage might include national parks, reserves and botanic gardens, as well as significant fauna and flora habitats or geological or geomorphological sites (note – biodiversity values are seen as separate to heritage and are considered by the Biodiversity theme).

How are we collecting data for the SoE 2021?

A major challenge in compiling the heritage theme report is the lack of empirical data or other easily accessible data. Reliance will therefore be placed on expert opinions expressed by national peak bodies and relevant advisory councils which have a strong professional interest in heritage and gathered via on-line survey and some small workshop discussion with invited participants; as well as through data solicited from national and state level heritage and protected area agencies. This survey is to elicit expert opinion as part of this data collection. Please note that participation in this survey is by invitation only. If you have received an email from a relevant expert body/organisation or one of the SoE 2021 Heritage authors asking you to undertake the survey and providing the link to the survey, this means you have been invited.

Given the nature of the SoE, the survey questions are generally framed and focused at the national and state level, and around the SoE 2021 approach which uses a pressures–state–management effectiveness framework. The SoE 2021 expert heritage on-line survey is similar to the SoE 2016 expert heritage survey to allow comparison across reports. The 2021 survey has been designed by the SoE 2021 Heritage theme authors, who also are responsible for the distribution and analysis of the survey.

What will we do with the SoE 2021 heritage data?

The full SoE 2021 report will comprise individual theme reporting plus a succinct overview volume, drawn from the twelve supporting thematic papers. The data you provide will be provided to the Department of Agriculture, Water & Environment on behalf of the Commonwealth of Australia as part of the Heritage theme report and as part of a Supplementary Paper which will report specifically on the heritage data collection. This data may be used under the terms of a Creative Commons Attribution licence to support the work being done for SoE 2021.

The data that you provide in this survey will be analysed by the Heritage theme authors. Individual responses will not be provided to the Commonwealth. This level of data will be used only by the Heritage theme authors for the SoE and will be treated as confidential. Where individual comments are used in the SoE reporting, these will not be personally attributed unless permission is given.

We hope you will take the 20-30 minutes to complete the survey which will contribute directly and significantly to the 2021 SoE Heritage theme findings.

Who should I contact if I have questions about this survey or the SoE 2021?

If you have any questions about this survey or the SoE 2021 Heritage theme, please contact the 2021 SoE Heritage theme lead author Anne McConnell at: ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮
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If you have broader questions about the SoE 2021, please contact ▮▮▮▮▮▮▮▮▮ of the SoE 2021 Section, Department of Agriculture Water and Environment at: ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮
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Questions – Respondent Profile (About You)

Question 1:
Have you been invited to participate in this survey as a member of a –
        professional heritage/environmental peak body; Indigenous heritage/community
        organisation; advisory council/committee; independent expert; other (please specify)
(Mark only one box)

Question 2:
What is/was your primary role in heritage?
        government officer; community officer/advisor/liaison; consultant, academic; other
        professional; none of the above
(Mark only one box)

Question 3:
How many years have you worked in heritage?
        0-10 yrs; 11-20 yrs; 21-30 yrs; 31 – 40 yrs; > 40 yrs
(Mark only one box)

Question 4:
Where do primarily undertake your heritage work?
　　　ACT; Qld; NSW; NT; SA; Tas; Vic; WA; at the national level; overseas
(Mark only one box)

If respondent works primarily overseas – should terminate the survey at this point.

Question 5:
Which of the following best represents your area of expertise?
　　　Indigenous heritage; historic heritage; underwater cultural heritage; natural (biological)
　　　heritage; natural (geo) heritage
(Mark only one box - this should indicate your key area of heritage expertise)

Next part - instructions
The following questions will ask you for your professional views in relation to your major area of heritage expertise (as indicated above in question 5). The questions are divided into three sections:

1. State and trends
2. Pressures
3. Management effectiveness

If you have major expertise in another field you will have the option to provide your views for a second area of expertise after you have answered the questions about your first area of expertise. Please do not do a second full survey [i.e., preferred that respondents do not exit and re-enter the on-line survey to complete the questions for the second area of expertise as the survey is designed to take a respondent directly to their second area of expertise if one is nominated].

If your expertise is primarily state based, not national, please respond in relation to the situation in your state.

Please note that you do not have to answer every question, but your survey will be much more valuable to us if you do answer all questions.

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1. Historic Heritage Evaluation (includes underwater cultural heritage)

State and Trends of Australia's Historic Heritage

Question 1:
How strongly do you agree with the following statements?
(Ask to mark only one box indicating agreement – 1 strongly agree to 5 strongly disagree; or 'unsure/don't know'.)

1.1　　Significant progress has been made in the collection of data to facilitate statutory listing for historic heritage.

1.2　　The amount of listed historic heritage places has increased.

1.3　　There have been more systematic, thematic or regional historic heritage assessment projects.

1.4   The majority of Australia's historic heritage places are in good condition and retain integrity of their identified values.

Question 2:
Do you have any further comment on the state and trends of Australia's historic heritage?
(free text)

Pressures on Australia's Historic Heritage

Question 3:
In the list of pressures below indicate which five pressures you believe have the greatest impact on Australia's historic heritage at the present time (considering in particular survival, condition and integrity).

- Climate Change: Rising temperatures
- Climate Change: Changing rainfall
- Climate Change: Rising sea level
- Climate Change: Altered fire regimes
- Climate Change: Extreme weather events
- Industry: Industrial development
- Industry: Industrial pollution
- Industry: Resource extraction
- Industry: Rural development - land clearing
- Industry: Rural development - land use intensification and land use change
- Industry: Tourism
- Population: Population growth
- Population: Population shift – resulting in urban densification and renewal
- Population: Population shift – resulting in urban spread
- Population: Service and infrastructure development (e.g., energy, water, transport, supply)
- Population: Recreation and leisure activities
- Population: Community perceptions of value
- Governance: Inadequate protections (poor statutory controls and poor governance)
- Governance: Inadequate realisation of community aspirations (relates to ownership, engagement, wellbeing)
- Governance: Inadequate resourcing for heritage conservation/management
- Other: Invasive species.
- Other: Human disasters (e.g., war, pandemics, infrastructure failure)
- Other: (please specify).

Question 4:
How do you perceive the level of impact of the following pressures on Australia's historic heritage?
(Ask to mark only one box indicating level of impact – 1 very high impact to 5 no impact (v high, high, low, v low, no) , or 'unsure/don't know').

1.1   Climate Change: Rising temperatures

1.2   Climate Change: Changing rainfall

1.3   Climate Change: Rising sea level

1.4   Climate Change: Altered fire regimes

1.5   Climate Change: Extreme weather events

1.6   Industry: Rural development and land clearance

1.7   Industry: Resource extraction

1.8   Industry: Secondary industry

1.9   Industry: Tourism

1.10   Population: Population growth

1.11   Population: Population shift

1.12   Population: Community use

1.13   Population: Community perceptions of value

1.14   Governance: Poor statutory controls and poor governance

1.15   Other: Invasive species

1.16   Other: Human disasters.

Question 5: (new for cultural heritage)
How do you perceive the level of impact of the above pressures on the following aspects of Australia's historic heritage?
(Ask to mark only one box indicating level of impact – 1 very high impact to 5 no impact, or 'unsure/don't know').

1.1   The survival (numbers) of protected of historic heritage places, areas, etc.

1.2   The integrity of historic heritage places, areas, etc.

1.3   Preservation of rare and representative historic heritage.

1.4   Ability to recognise and protect setting, related places, objects, etc.

Management of Australia's Cultural Heritage

Question 6:
In the list of management actions below indicate which five actions you believe are of highest priority to improve the protection of Australia's historic heritage.

- Protection: Improved recognition, including at the statutory level, for the broad range of historic heritage (including intangible heritage and moving beyond land based only heritage.
- Protection: Improved heritage legislation.
- Protection: Improved planning provisions for heritage.
- Protection: Australia's ratification of international heritage related conventions, declarations, and other policies.

- Protection: Greater management planning for heritage places.
- Identification: Improved identification and assessment of historic heritage.
- Identification: Improved resourcing for the identification and assessment of historic heritage.
- Management: Improved government resourcing for the management and protection of historic heritage.
- Management: Improved structures, processes, and governance generally, in place to coordinate and manage historic heritage.
- Management: Improved risk assessment adaption/risk mitigation planning for new threats/risks.
- Management: Greater monitoring of the state/condition of historic heritage places.
- Management: Greater historic heritage management (including governance) evaluation.
- Management: Improved historic heritage management systems (including better cross-system standardisation).
- Management: Greater leadership in heritage protection from government.
- Management: Maintenance and review of the Australian Heritage Strategy.
- Governance: Greater community participation in historic heritage management. [*For Indigenous heritage reword to* - Greater Indigenous participation and authority in decision making about the management of Indigenous heritage].
- [*Indigenous heritage only*] Governance: Greater access by Indigenous people to sites and traditional resources, land and seas.
- Education: Improved training opportunities for heritage professionals.
- Education: Improved trades/traditional skills training opportunities.
- Education: Improved heritage education for the community.
- Presentation/Celebration: Improved presentation of historic heritage (including through the presentation of more places, improved heritage information and facilities).
- Other: (please specify).

Question 7:
How strongly do you agree with the following statements?
(Ask to mark only one box indicating agreement – 1 strongly agree to 5 strongly disagree, or 'unsure/don't know'.)

1.1   Governance: The community has a satisfactory level of participation and voice in historic heritage management, including in decision making. [*For Indigenous heritage reword to* - Indigenous people have a high level of participation and voice in decision making about Indigenous heritage].

1.2   [*Indigenous heritage only*] Governance: Indigenous people have good access to Indigenous sites and traditional resources, land and seas.

1.3   Governance: The way in which Australia's historic heritage is managed and the existing level of protection contributes positively to community well-being.

1.4   Identification: Australia's historic heritage is well understood and appropriately recognised.

1.5   Identification: Adequate resources are available for the survey, identification and assessment of Australia's historic heritage places.

1.6   Protection: Australia's historic heritage receives adequate protection through existing statutory controls.

1.7   Protection: Appropriate management plans or other mechanisms are in place for the management of Australia's historic heritage places.

1.8   Protection: Decisions regarding historic heritage places are well informed by an understanding of heritage values and relevant national and international principles and guidelines (including the Burra Charter).

1.9   Protection: Risks to historic heritage due to climate change are adequately understood and there is good preparedness through adaptation, risk management and/or sustainability planning where relevant.

1.10   Protection: The use of international heritage related guidelines and policy strengthens the protection of Australia's historic heritage.

1.11   Management: There are appropriate governance structures in place to coordinate and manage historic heritage in Australia.

1.12   Management: There is adequate monitoring and evaluation of the health and management of Australia's historic heritage in place.

1.13   Management: Management needs and processes are well understood and are well managed by those responsible for managing Australia's historic heritage places.

1.14   Management: Adequate resources are available to support the management of Australia's historic heritage places.

1.15   Presentation/celebration: Historic heritage places in Australia are accessible, well presented and contribute to the community's sense of place.

What are your views on the Australian Heritage Strategy and its implementation?

Question 8:
It is now five years since the Australian Heritage Strategy was implemented. How strongly do you agree with the following statements?
(Ask to mark only one box indicating agreement – 1 strongly agree to 5 strongly disagree, or 'unsure/don't know'.)

1.1   The Australian Heritage Strategy has made a significant positive contribution to the protection and management of Australia's historic heritage.

1.2   Good progress has been made in implementing the Australian Heritage Strategy.

Question 9:
In your view, how could the Australian Heritage Strategy be improved (focusing on the general approach, outcomes, objectives, actions and implementation/delivery of outcomes)?
(free text).

Is there other Information you would like to provide?

Question 10:
Do you have any other comment?
(free text)

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The questions for Indigenous Heritage, Geoheritage, and Natural Heritage were essentially the same as for Historic Heritage, but some minor changes were required to make them relevant to the particular type of heritage.

The changes for Indigenous Heritage, Geoheritage, and Natural Heritage compared to Historic Heritage are listed below.

2. Indigenous Heritage

1. All 'historic heritage' changed to 'Indigenous heritage'.

2. Use of the following in the Pressures section in relation to question 5:

     1.1   The survival of protected Indigenous heritage.

     1.2   The integrity of Indigenous heritage.

3. Additional minor changes in the Management Effectiveness section (see above).

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3. Geoheritage

1. All 'historic heritage' changed to 'geoheritage'.

2. Question 7, item 1.5 – remove 'including the Burra Charter'.

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4. Natural Heritage (general)

1. All 'historic heritage' changed to 'natural heritage'.

2. Question 5 - the items to be assessed replaced with the following -

     1.1   The amount (area) of protected natural heritage places, areas, etc.

     1.2   The integrity of protected natural places, areas, etc.

     1.3   Biodiversity

     1.4   Habitat

     1.5   Connectivity.

3. Question 7, item 1.5 – remove 'including the Burra Charter'.

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