1. ABOUT THIS REPORT

# **The Client**

In June 2019, the former Department of the Environment and Energy (DEE) commissioned SGS Economics and Planning to undertake desk-top review of Indigenous engagement in the National Environmental Science program (NESP) to identify Indigenous environmental and climate science research themes and questions and existing resources to support Indigenous collaboration.

Machinery of Government changes came into effect on 1 February 2020, which saw the Environment functions of DEE moved to become part of the Department of Agriculture, Water and the Environment (DAWE). Any references to the former Department of the Environment and Energy (DEE) are correct in relation to events or circumstances prior to the end of January 2020. However, as from 1 February 2020 any references to DEE should be read as references to the Department of Agriculture, Water and the Environment (DAWE). For the purposes of this Report, we use the term ‘Department’ to cover both.

# **NESP2 Announcement by the Minister for the Environment**

In March 2020, the Minister for the Environment announced an investment of $149 million over six years for the second phase of the NESP (Ley, 2020). The second phase of the Program will build on past achievements and will be delivered through four new hubs:

* + - The **Resilient Landscapes** hub will focus on increasing the resilience of Australia’s natural landscapes and biodiversity at continental, regional and local scales. The ‘Resilient Landscapes’ Hub will deliver:
      * applied research to support management of Australia’s terrestrial and freshwater habitats, including a focus on bushfire recovery, feral animals and invasive species impacts, and accessible science to assist land managers to create and maintain resilient, sustainable and productive landscapes;
      * targeted biodiversity and taxonomy products to support efficient system monitoring;
      * environmental monitoring systems and decision support tools;
      * cross-hub coordination for the ‘threatened and migratory species and ecological

communities’ functional mission to support policy development, program management and regulatory processes to protect Australia’s environmental assets in terrestrial, Ramsar and marine environments.

* + - The **Marine and Coastal** hub will focus on Australia’s national temperate and tropical marine,

coastal and estuarine environments. The ‘Marine and Coastal’ Hub will deliver:

* + - * applied research to support management of Australia’s marine and coastal environments including estuaries, coast, reefs, shelf and deep-water;
      * targeted biodiversity and taxonomy products to support efficient system monitoring;
      * environmental monitoring systems and decision support tools;
      * cross-hub coordination for the ‘protected place management’ functional mission to support the management of our protected places and heritage including the national park estate and Ramsar sites in both marine and terrestrial environments.
    - The **Sustainable Communities and Waste** hub focus on improving the liveability of our urban and rural environments while delivering critical advice on how to reduce the impact of waste, chemicals and air pollution on the environment. The ‘Sustainable Communities and Waste’ Hub will deliver research that supports:
      * targeted information and management tools to reduce the impact of plastic and other material on the environment;
      * applied scenario modelling to support sustainable people-environment interactions in communities including urban heat island impacts and liveability analysis;
      * effective and efficient management options for hazardous waste, substances and pollutants throughout their lifecycle to minimise environmental and human health impacts
      * maintained and improved air quality;
      * cross-hub coordination for the ‘waste impact management’ functional mission to support decision maker policy development, program management and regulatory processes in both marine and terrestrial environments.
    - The **Climate Systems** hub will focus on climate events such as rainfall and drought, heatwaves, fire weather, storms, flood and cyclones. The ‘Climate Systems’ Hub will:
      * maintain our world-class capability in multidisciplinary Earth system science and modelling
      * advance understanding of Australia’s climate variability, extremes and associated drivers, including the fundamental drivers of bushfires, drought and rainfall in the Australian region
      * develop applied decision-making tools and information to inform policy and programs to prepare Australia to manage emerging risks and opportunities
      * cross-hub coordination for the ‘climate adaptation’ functional mission to support climate information to program hubs to drive integrated adaptation research across the program to support evidence-based decision-making and improve Australia’s climate resilience.

Indigenous inclusion will be embedded into each hub at the outset supported by mandated targets and a cross-hub network. Each hub will also include a senior Indigenous facilitator who will sit on all senior hub committees to ensure strong partnerships, collaboration and engagement with Indigenous Australians.

The senior Indigenous facilitator will form part of the cross-hub Indigenous Facilitation Network, which will be supported by the Department to drive Indigenous inclusion at the program level (DAWE, 2020).

One of the key changes from the current NESP is that each hub has responsibility for a cross-cutting mission to support an integrated, national approach to complex environmental issues (see [**Figure 1.1**](#_bookmark0)). The Minister’s announcement included the NESP2 Grant Opportunity Guidelines and a call for applications for the four new Hubs from collaborative, multi-disciplinary and multi-institution/organisation consortia or groups (Ley, 2020), to be submitted by 30 June 2020. The information provided by the Department about the research scope for each of the four new Hubs states that:

*Applicants for each of the Hubs must be able to demonstrate an ability from the start of the program to establish or maintain long-term, two-way partnerships with traditional owners and Indigenous communities. This means Indigenous knowledge must be treated with respect and reciprocated in culturally appropriate ways in the form of shared practical research outcomes for traditional owners, communities and land managers, and capacity building for Indigenous communities. Each of the Hubs must include mechanisms to nurture the next generation of Indigenous researchers including in remote regions.*

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| **NESP 2 RESEARCH HUBS – FOCUS OF RESEARCH MISSIONS** | |
| **RESILIENT LANDSCAPES HUB** | **CLIMATE SYSTEMS HUB** |
| **Threatened and migratory species and ecological communities Mission**  Delivery tools and advice to support the conservation of habitat important for priority threatened species, threatened ecological communities and migratory species;  Updating the National list of threatened ecological communities and species;  Improving detection of cryptic, ‘difficult’ and other data deficient species; and  Monitoring and supporting the management of species /community recovery post extreme events**.** | **Climate adaptation Mission**  Support integrated research across the program to improve the evidence base for adaptation decision making for climate resilience;  Marine and coastal ecosystem management for sea- level rise and ocean acidification; and  Building traditional cultural knowledge into climate understanding and working with indigenous communities to help them adapt to the changing climate. |
| **MARINE AND COASTAL HUB** | **SUSTAINABLE COMMUNITIES AND WASTE HUB** |
| **Protected place management Mission** Supporting the management of natural, cultural and Indigenous values in protected places, including Australian Marine Parks, Ramsar sites and World Heritage Areas;  Identifying key drivers of resilient populations and ecosystems across protected areas; and  Supporting the improvement of governance mechanisms for protected places. | **Waste impact management Mission** Innovative methods for reuse of materials, including proof of concept demonstration;  Options for improved construction and demolition waste management;  Baseline and ongoing recycling measures in the Australian economy;  Socio-economic analysis to assist with waste reduction and increased use of recycled materials;  Improved material sorting and re-processing; and  Options for the management and quantification of waste stockpiles. |

**Figure 1.1: NESP 2 Research Hubs and Focus of Research Missions**

Source: NESP2 Grant Opportunity Guidelines

# **The Brief for a review of Indigenous engagement in NESP**

The Department of Environment and Energy acknowledged in the Brief for this work that Indigenous Australian’s are key custodians of the environment and vital partners in the Department’s work. As the NESP is scheduled for completion in 2021, the Department wanted to bring together existing work on Indigenous environmental research themes and questions and existing resources to support Indigenous

collaboration as a starting point to inform research planning and preparation for the next iteration of the NESP.

The brief issued to SGS Economics and Planning (SGSEP) required us to:

* + - Scope Indigenous environmental and climate science research themes and questions through a desktop review, collating and synthesizing existing work on identifying themes/questions, and provide guidance on how to interpret the material provided. Sources should include but not be limited to existing NESP research hubs, Caring for Country/Working on Country/Healthy Country Plans, Indigenous Land Councils, Prescribed Body Corporates and Native Title Representative Bodies, CSIRO Indigenous Futures, and the PM&C Regional Network.
    - In regions where documented research themes have not been found online, consult with relevant representative and peak bodies to ascertain whether they are aware of any documented sources and how to access them.
    - Collate existing resources to support Indigenous collaboration in environmental research, for example template agreements, engagement protocols/principles and case studies. These resources should be drawn from, but not be limited to, existing NESP research hubs, Departmental line areas and other relevant organisations (e.g. AIATSIS).
    - Liaise with NESP Indigenous stakeholders about the draft findings using desktop methods, including 3-4 virtual meetings, emails and phone calls to seek feedback and comments. Prepare a consultation summary and list of parties who were consulted for inclusion in the Final Report.

# **Report Structure**

**Chapter 1** sets out the parameters of the brief for this desk-top review of Indigenous engagement in the NESP, our acknowledgements of those who contributed their time and effort to this review, caveats and limitations that apply to this review, notes on concepts and terms used in this report and disclaimer.

**Chapter 2** sets out the background to the NESP and how Indigenous engagement came to be an important component of the Program, especially from 2017 to the present.

**Chapter 3** presents our review of the NESP Hubs’ commitment to Indigenous engagement. The Chapter examines the Indigenous engagement and participation strategies (IEPS) prepared by the Hubs, approaches to Indigenous engagement by the Hubs, the reporting on key performance indicators of Indigenous engagement as required by the Department from 2017, the NESP Hubs Cross-Hub activities, the NESP Hubs’ synthesis and ground-breaking Indigenous-led research activities, an analysis of Indigenous engagement activities in research projects undertaken by the Hubs, and our findings and conclusions about each of the Hubs and their Indigenous engagement.

**Chapter 4** presents an overview of selected Commonwealth Agencies and Departments to identify NESP Indigenous research activities and Indigenous research themes and questions. Using publicly available information, SGSEP reviewed the programs and/or research activities, their Indigenous engagement policies and activities, and their interactions with the research activities of the NESP Hubs.

**Chapter 5** presents our spatial analysis of the NESP Hub Indigenous research projects against a number of different thematic layers, including by State/Territory, Australia’s Marine BioRegions (MB Hub projects only), Australia’s Terrestrial BioRegions, Natural Resource Management (NRM) Regions. Indigenous Protected Areas (IPAs), and the Indigenous estate and discusses the correlation between these underlying geospatial themes or elements and their relationship to Indigenous environmental and climate science research themes and questions.

**Chapter 6** presents our analysis of the management plans of the Indigenous Protected Areas (IPAs) in Australia. IPAs are prepared by the Traditional Owners and therefore carry a high degree of authenticity in terms of the identified threats and management actions and any research themes or questions they may have identified as necessary to support their management actions. With the Department’s assistance we located Management Plans for 49 of the current 76 declared IPAs and seven Healthy Country management plans for other localities. We examined these plans to ascertain the extent to which they identify environmental and climate science research themes and questions.

**Chapter 7** presents our findings in relation to resources supporting Indigenous engagement in environmental and climate science research. The Chapter reviews over 44 engagement resources from a wide range of sources and grades their applicability to NESP Hub research activities, a discussion of the

definitions of ‘engagement’ and ‘effective engagement’, the opportunities for integration of Indigenous knowledge and Western science that collaborative engagement in environmental and climate science research presents, a discussion of the agreements and protocols that the NESP Hubs currently deploy to

manage their Indigenous engagements, the upgrade of the AIATSIS *Guidelines for Ethical Research in Australian Indigenous Studies* to a *Code of Ethics* (AIATSIS, 2012, 2020), and protections for Indigenous cultural and intellectual property (ICIP) and data sovereignty.

**Chapter 8** presents our findings and conclusions with recommendations for the next iteration of the NESP. The structure of the Chapter reflects the four tasks in the brief: scoping Indigenous environmental and climate science research themes and questions; spatial gap analysis; resources supporting Indigenous engagement, and consultation outcomes.

**Appendices A to M**. provide supporting information and analysis.

# **Additional Outputs**

In order to satisfy the terms of the Brief, SGSEP also produced several other outputs, including:

* + - An Overview of each of the six NESP Hubs’ scope of research, Indigenous engagement policies and

resources and summaries of selected projects.

* + - An excel spreadsheet of the 108 NESP Hub research projects that SGSEP was guided to by the Hubs or that SGSEP selected on the basis of having a high level of Indigenous engagement.
    - An overview of nine (9) selected Commonwealth Agencies and Departments. Using publicly available information, SGSEP reviewed the programs and/or research activities, their Indigenous engagement policies and activities, and their interactions with the research activities of the NESP Hubs.
    - An excel spreadsheet analysing 46 IPA management plans and 7 other Health Country management plans for non-IPA areas.

All of these documents have been provided to the Department separately to this Final Report.

# **Acknowledgements**

SGSEP is grateful to the Knowledge Brokers in each of the six NESP Hubs who gave generously of their time and effort to locate documents, provide information and review draft documents. We thank them sincerely. We also want to acknowledge the contributions of the many Hub Steering Committee members, Indigenous Advisory Group members and Indigenous researchers who also gave freely of their time to have discussions with us via various electronic platforms following the restrictions on face-to-face meetings that were introduced following the emergence of the COVID-19 pandemic.

SGSEP also appreciates the time given by many other people who agreed to be interviewed and participate in discussions along the way, especially many Aboriginal and Torres Strait Islander people and organisations around the country.

SGSEP also wishes to thank Ms Hmalan Hunter-Xenie, an Aboriginal woman who was born on Larrakia Country in the NT, for permission to cite her ANU Honours research on Aboriginal peoples’ experiences in land and water research in the Northern Territory.

SGSEP would also like to acknowledge our appreciation of the time, insights and assistance provided by the Science Partnerships Section and other officers within the Department of Agriculture, Water and the Environment (DAWE) and other Commonwealth agencies. Their assistance in providing information, locating documents and recalling the history around policies, programs and events was very helpful and greatly appreciated.

We trust we have reflected your views fairly and constructively in this report.

# **Caveats and Limitations**

SGSEP prepared separate overviews of Indigenous Engagement on each the NESP Hubs’ activities. The Overviews were initially based on each Hub’s Annual Research Plan V5 and whatever information was

publicly available on the respective Hub’s websites. Part way through this review, Annual Research Plan V6 was approved by the Minister. This meant that our initial draft Overviews had to be updated to ensure they contained the latest information available.

In order to ascertain an understanding of the nature of Indigenous engagement in each of the NESP Hubs’ research activities, SGSEP undertook a closer examination of a selection of research projects from each of the Hubs. The timeframe and budget for this review did not allow for an analysis of all of the research projects across the life of the NESP. The analysis of Indigenous engagement in NESP Hub research projects is therefore based on 108 projects that SGSEP was guided to by the Hubs or that SGSEP selected on the basis of having a high level of Indigenous engagement (see **Appendix D** for details of the selected projects).

Project descriptions of the selected projects in the NESP Hub Overviews are based on the specific Project Plans prepared by the Hubs at the outset of the respective projects. In many cases, the original intent may have been exceeded as opportunities arose during the project. Where possible, some of these outcomes or achievements are reflected in the detailed information on the level of Indigenous engagement by each of the Hubs and in the Excel spreadsheet that accompanies this Report.

SGSEP also reviewed the programs and research activities of selected Commonwealth Agencies and Departments to ascertain to the extent to which they interact with the NESP Hubs’ research activities and outputs as end users, and engage with Indigenous peoples about their environmental and climate science research themes and questions. Those reviews commenced before the machinery of government changes that abolished the Department of the Environment and Energy and created the Department of Agriculture, Water and the Environment came into effect on 1 February 2020, but were updated after that date to take account of those changes.

The information contained in this Report and in the Overviews prepared by SGSEP are based on a desktop assessment of publicly available online materials and annual plans and reports provided by the NESP Hubs, their host organisations and the relevant Commonwealth agencies and departments. We sincerely thank them for their cooperation in providing information, reviewing drafts and providing comments or corrections.

Just as SGSEP was beginning to undertake a wider search for information and consultations with various stakeholders outside of the NESP Hubs and Commonwealth departments and agencies, COVID-19 emerged. The subsequent restrictions and lockdown of work places had a significant impact on our ability to communicate with many Aboriginal and Torres Strait Islander organisations as many of them closed their offices, removed information from their websites and cancelled all existing permits unless they were for the provision of essential services as a way of protecting their communities from unnecessary visitors. Many of the Land Councils in particular replaced their access and engagement pages with information about the closure of their communities and comprehensive information about personal hygiene practices and avoiding the spread of COVID-19.

It is also necessary to state that the authors of this report are not Indigenous and do not claim to represent the views of Indigenous Australians. We were approached directly by the Department to undertake this review because of our knowledge and understanding of the rights and interests of the Aboriginal and Torres Strait Islander peoples as the original custodians of this land and waters and our knowledge and experience in academic scientific research and public policy. On accepting the Department’s brief, we noted the task was to undertake a desk-top review of the NESP and that face-to-face consultations with Indigenous peoples was not included in the scope of work. To the Department’s credit, they listened to our advice that some face-to-face consultations should be included, and with the emergence of COVID-19 and the imposition of social distancing, it became possible to hold video meetings via many different

electronic platforms. In April 2020, the Department therefore extended the brief to enable us to hold electronic meetings with several Aboriginal and Torres Strait Islander stakeholders, including members of the Minister for the Environment’s Indigenous Advisory Committee. The timing coincided with the completion of our preliminary findings and enabled us to circulate the document to key stakeholders for review and comment. We would like to thank those people that gave generously of their time to read draft documents and for meeting with us electronically to provide their feedback. These consultations provided invaluable feedback and insights and we are very grateful for the time and effort people made to connect with us. It was an enriching experience.

However, that is not to say that this report represents the collective views of Indigenous peoples about their environmental and climate science research themes and questions. It does not. As we make clear in our recommendations, it will be necessary at the commencement of NESP2 to undertake such consultation with Indigenous peoples around Australia to ascertain what their environmental and climate science research themes, questions, needs and priorities are, as we recommend above and in **Chapter 8**.

# **Notes on Concepts and Terms used in this Report**

The term **‘Indigenous’** has evolved through international law and acknowledges a particular relationship of Aboriginal people to the territory from which they originate. The *Convention on Biological Diversity* (1992) uses the term ‘**Indigenous and local communities’** in recognition of communities that have a long association with the lands and waters that they have traditionally live on or used (UN PFII, 2004). The term **‘Indigenous peoples’** has been the subject of considerable discussion and study and there is no universal, standard definition thereof (WIPO, 2019a). Generally, the term **‘Indigenous peoples’** refers to the diverse international community of Indigenous Peoples, whose distinct identity and rights are recognised in international law (i.e. the United Nations *Declaration on the Rights of Indigenous Peoples* (UN, 2007)), unless otherwise specified.

Throughout this report we use the terms **‘Indigenous’**, **‘Aboriginal’ and/or ‘Torres Strait Islander’** peoples, capitalised to refer to the huge number of individuals, family groups, clans, language groups and others, who are descendants of Australia’s first peoples, the Aboriginal and Torres Strait Islanders Peoples. We use the plural because we respect the fact that in 1788 there were over 500 Aboriginal and Torres Strait Islander nations scattered about the Australian continent, each with their own distinct laws and customs, land tenure systems (Wallace-Bruce 1989: 97) and land use planning and management systems (Wensing, 2019). Indigenous people and Aboriginal and Torres Strait Islander people refers to individuals.

Many Aboriginal and Torres Strait Islander people prefer to identify with their language group/s and traditional land/s from where they trace their ancestry. We use those more localised or regional terms when referring to a particular group or groups of people. For example, the Bardi and Jawi People to refer to the peoples whose country is at the northern tip of the Dampier Peninsula in Western Australia, or the Malgana Aboriginal Corporation and Malgana Rangers for the people whose country takes in Shark Bay in the World Heritage Listed Shark Bay in WA.

The term **‘Traditional Owner’** came into common usage in the mid-1970s following the passage of the *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth), which established mechanisms through which Aboriginal people could claim unalientated Crown Land in the Northern Territory on the basis that they are the ‘traditional Aboriginal owners’ of the land. The term ‘traditional owners of indigenous people’s land’ is defined in s.368(4)(a) of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) and in s.4 of the *Aboriginal and Torres Strait Islander Act 2005* (Cth). The term has also been replicated, in full or in part, in other statutes in some of the other jurisdictions around Australia. While the term **‘Traditional Owner’** holds particular meaning in some legal contexts, it is used in this Report to recognise the connections to Country and culture of the First Nations Peoples of this land and waters that pre-date the colonisation of Australia from 1788.

The term **‘Country’** refers to ‘the collective identity shared by a group of people, their land (and sea)’ (Palmer, 2001) and includes all the ‘values, places, resources, stories, and cultural obligations’ (Smyth, 1994) associated with Aboriginal and Torres Strait Islander peoples’ ancestral lands and waters. D.B. Rose (1996:10) in her ground-breaking work for the former Australian Heritage Commission, also found that ‘Country’ ‘is synonymous with life’ and that ‘life for Aboriginal people needs no justification’. That Aboriginal peoples’ conception of country is ‘multi-dimensional’ consisting of ‘all people, animals, plants, Dreamings, underground, earth, soils, minerals and waters, surface water, and air; that it has origins and a future; and that it exists both in and through time’. All of these are identified by Aboriginal people as being integral parts of their particular country, and each country is surrounded by other unique and

inviolable whole countries, ensuring that no country is isolated and ‘together they make up some larger whole’, each not knowing the full extent because ‘knowledge is, of necessity, local’ (D.B. Rose, 1996:9, 12, 13). Healthy country is ‘one in which all the elements do their work’, nourishing each other (D.B. Rose, 1996:10). There is no site for self-interest because ‘the interest of all of the other living components of country, cannot exist independently of each other *in the long term.*’ (D.B. Rose, 1996:10, emphasis in original). ‘Each country is understood by its people to be a unique and inviolable whole’ and ‘the interdependence of all life within country constitutes a hard but essential lesson – those who destroy their country ultimately destroy themselves’ (D.B. Rose, 1996:10). Gammage (2011:139) sums it up more

succinctly: ‘Songlines distributed land spiritually; ‘Country’ distributed it geographically’. Therefore, the term **‘Country’** is upper case throughout this report when it refers to the traditional land and sea territories of Australia’s Aboriginal and Torres Strait Islander Peoples, except where it occurs within a direct quote.

**Cultural Knowledge**is a term used by the courts in *Western Australia v Ward* (2002) 213 CLR 1 and the Australian Law Reform Commission (ALRC) review of the *Native Title Act 1993* (Cth), *Connection to Country* (ALRC, 2015). While the High Court of Australia in *Western Australia v Ward* noted that there is a lack of

precision in what encompasses ‘cultural knowledge’ but recognised that it includes such knowledge as ‘secret ceremonies, artworks, song cycles and sacred narratives’3, the Australian Law Reform Commission in its review of the *Native Title Act 1993* (Cth), adopted a wider view, as follows:

*Cultural knowledge is a core aspect of the law and custom of Aboriginal and Torres Strait Islander communities. The term ‘cultural knowledge’ signifies an intense affiliation with land and waters, where ‘places are discursively acknowledged as being essentially and primarily particular things in place, things that are resonances and signs of the ancestral past’*. (Langton 2010)-:87) *It can encompass particular forms of expression of the knowledge of places—such as dance, art, stories and ceremonies, to knowledge of the medicinal properties of plants and genetic resources. It includes knowledge that is not to be openly-shared, but which is transmitted through particular genealogically and spatially referenced processes. Cultural heritage is a cognate term also adopted to describe this knowledge, as well as physical expressions of culture, such as paintings* (ALRC 2015:262).

**Indigenous Cultural and Intellectual Property**or ‘ICIP’ is widely used in Australia following the report *Our Culture: Our Future* (Janke, 1999). It follows the terminology used in the Draft United Nations *Declaration on the Rights of Indigenous Peoples* in the mid-1990s and used in the pivotal international study conducted by Madam Erica-Irene Daes (Daes, 1993). While the scope of ICIP is constantly evolving (Terri Janke and Company, 2018:3), at a minimum it includes free, prior and informed consent, integrity, attribution and benefit sharing (Janke, 2019:v). Janke (2019:v) also asserts that the appropriation of ICIP without the free, prior and informed consent is not only demeaning, but is also steals economic opportunities from Indigenous peoples. ICIP also includes intangible and tangible aspects of cultural heritage from cultural property, cultural sites to languages, human remains and documentation of Indigenous peoples.

3 *Western Australia v Ward* (2002) 213 CLR 1 [58, 468].

The terms **Indigenous Ecological Knowledge**(IEK), **‘Indigenous Traditional Knowledge’**(ITK) and **‘Traditional Ecological Knowledge’**(TEK) are used Interchangeably) in this report, recognising that Indigenous societies are the holders of IEK or ITK or TEK (Fordham *et al,* 2010). IEK is defined by Berkes *et al* (2000:1252) as ‘a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment’ and that it is ‘attribute of societies with historical continuity in resource use practice’ Jackson and Douglas (2015) also recognise that ‘IEK forms part of governance and cultural systems that encompass language, naming and classification systems, resource use practices, rituals, spirituality and worldviews.’ IEK is in a continual state of change ‘as it acquires deeper and more extensive understandings of the local environment and adapts to environmental changes and intercultural interaction.’ (Fordham *et al,* 2010:4).

Consistent with Austin *et al* (2018), we have also adopted the term **Indigenous Knowledge**(IK) to refer to ‘*all* of the knowledge practices-beliefs held by Indigenous people today that have both been passed on from generation to generation *and* continue to developed within the Indigenous domain’ (emphasis in original).

When quoting from other sources or referencing published works, the original usage of these terms in the source is retained.

# **Disclaimer**

The views expressed in this report are those of the authors and do not necessarily reflect those of the Minister for the Environment, the Australian Government, the Department of Agriculture, Water and the Environment or the NESP Hubs. Any errors of fact or oversights remain with SGSEP and the authors.

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