Concept Plan SP 2020-008

Horizon scanning priority social science research needs to support DBCA Corporate Strategic Directions

Ecosystem Science

Project Core Team

Supervising Scientist	Andrew T Knight
Data Custodian	Andrew T Knight
Site Custodian	

Project status as of June 16, 2020, 9:44 a.m.

Pending project plan approval

Document endorsements and approvals as of June 16, 2020, 9:44 a.m.

Project Team	granted
Program Leader	granted
Directorate	granted

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Biodiversity and Conservation Science Program

Ecosystem Science

Departmental Service

Service 6: Conserving Habitats, Species and Communities

Background

Strategic planning of science is undertaken by Biodiversity and Conservation Science (BCS) to identify appropriate science that in turn supports the Strategic Directions of DBCA. This ensures that the science delivered is usefully directed through BCS scientific programs to support DBCA business process. This approach contributes to ensuring effective delivery of biodiversity and conservation science that is collaborative, innovative, ethical and outcome driven. Useful science provides timely information upon which DBCA decisions can be based and defended, and enhances the return-on-investment of DBCA funding and resources for core business activities.

Many business processes within DBCA occur at the intersection of ecological, economic and social systems. BCS is well recognised for delivering excellent ecological science that informs biodiversity conservation. Social science is recognised by BCS as an important complement to ecological science for supporting the strategic directions of DBCA.

Identifying current and future social science research priorities is an important activity for conservation organisations. Current priority topics for DBCA can meet immediate departmental needs, whilst anticipating future needs can promote increasingly effective allocation of time, funding and resources through well-targeted research. Priority social science research priorities should be feasible, present a high likelihood of being delivered effectively, cost-efficient and equitable.

Horizon scanning is a methodology widely used to identify priority research directions for organisations and the individuals within them. It applies scientific techniques to systematically anticipate, identify and examine current information gaps usefully filled by research (resources permitting), as well as future information needs. Social science prioritised through horizon scanning can provide information that enhances evidence-based decision-making, program cost-efficiency, targeted conservation actions, and, ultimately, a positive perception of DBCA by the public.

Aims

The proposed research aims to identify priority social science research needs that can support delivery of DBCA business processes

The horizon scanning methodology is founded upon an expert elicitation technique known as the Delphi method. It comprises a structured approach to decision-making in complex contexts where documented data and information (or opportunities for gathering these) is lacking, but where expert knowledge is available. The Delphi method has been refined and applied in a diverse range of contexts. It is proposed to apply a methodology refined from the approach of Gluszek et al. 2020, which uses a remote, internet-based platform for eliciting knowledge using Qualtrics software. This is important because of the vast distances across which DBCA staff are dispersed across WA.

The horizon scan methodology comprises four primary stages: 1) data collection comprising a simple rapid online survey and review by Regional Managers and Nature Conservation Leaders; 2) Analysis where priority social science topics are identified and ranked; 3) Approval of the priority topics by Executive Director, BCS which includes necessary refinements prior to; 4) Completion of a small number of Science Concept Plans for consideration by the BCS Leadership team.

These four stages of the horizon scanning activity will be followed by a set of stages that are not science in the strict sense, but that define ‘applied’ research and are designed and implemented to mainstream the outputs of the proposed project into DBCA activities. These include 1) returning the findings to staff who’ve participated in the horizon scan through ‘topic summaries to ensure that they are fully-informed about the outcomes of the horizon scan; 2) interpreting the topics as a small number of Science Concept Plans (SCP) for approval by the BCS Leadership Team, which in turn form the basis of a research plan by Dr Andrew Knight; 3) developing

partnerships and funding applications to initiate projects guided by the SCPs; and finally 4) evaluating the horizon scanning methodology is evaluated and refined, so that the pros and cons of the methodology can be identified, and a decision made as to the utility of the overall approach.

Expected outcome

The identification of priorities for social science research to support DBCA business in ways that are timely, useful and scientifically robust. The expected outcomes of this research provide an opportunity to enhance the evidence-base, effectiveness and cost-efficiency of activities delivering DBCA Corporate Strategic Directions.

Strategic context

Social science is relevant to departmental activities identified in the 'DBCA Strategic Directions 2018-21' and the 'DBCA Science Strategic Plan 2018-2021'. People and their communities are directly or indirectly relevant to most of the business processes of the department, as people either implement, fund or are affected by both internal and/or external DBCA activities. As such, social science can directly and indirectly support delivery of departmental strategic directions.

The development and implementation of an horizon scanning activity to identify priority social science research topics can assist in supporting the resultant projects that can assist the achievement of five 'Strategic Directions' including : 'Biodiversity and conservation'; 'Natural and cultural values'; 'Attractions'; 'Fire management'; and 'Our community and partners'. Such social science can be enacted in many ways, including, for example,: 1) the building of partnerships between DBCA and stakeholder groups such as Traditional Owners, resource user groups and the public; 2) the design and evaluation of volunteer, citizen science and community engagement programs that can educate and inspire the broader public, and; 3) the engagement of the community in nature-based tourism.

Social science research identified through this project aims to complement the social science research currently being undertaken in the Parks and Wildlife Service.

Expected collaborations

Research relationships that underpin the effectiveness of this research are internal to DBCA. In the first instance, Dr Andrew Knight will lead the project in collaboration with Dr Amanda Smith (PVS). This partnership will ensure coordination across the social science activities of BCS and PVS. As Executive Director, BCS, Dr Margaret Byrne will play a key role given her oversight of BCS activities. Key DBCA staff 'experts' responsible for directing or implementing business activities will be sought to provide their insights. These will include Executive Directors, Regional Managers, District Managers, Branch Managers, members of the BCS Leadership Team and Conservation Leaders Working Group, and other staff identified as involved in activities with potential relevance for social science during the research process.

Proposed period of the project

Feb. 3, 2020 – July 31, 2020

Staff time allocation

Role	Year 1	Year 2	Year 3
Scientist	0.7	N/A	N/A
Technical	N/A	N/A	N/A
Volunteer	N/A	N/A	N/A
Collaborator	0.02	N/A	N/A

Indicative operating budget

Source	Year 1	Year 2	Year 3
Consolidated Funds (DBCA)	0	0	0
External Funding	0	0	0