



Position description

POSITION TITLE	Natural Capital data analyst
ROLE GRADE	8
COST CENTRE	Strategy Innovation & Business Development
LOCATION	National
DATE REVIEWED	March 2022
POSITION BASIS	Full time

Introduction

Bush Heritage Australia is a national non-profit organisation that buys and manages land to protect our irreplaceable landscapes and our magnificent native species forever.

We buy land that has outstanding conservation values and reconnect fragmented landscapes to protect habitat for wildlife. Bush Heritage works across 19 priority landscapes and owns 36 reserves. In addition, we partner with Aboriginal people and agricultural landowners to achieve conservation outcomes. Currently, Bush Heritage is working across more than 11.3 million hectares, protecting more than 6700 native species and at least 226 endangered species.

Established in 1991, Bush Heritage has around 35,000 supporters Australia-wide and an annual operating budget of over \$20 million. We are primarily funded by donations from individuals and philanthropic sources.

Our culture is characterised by a collaborative and supportive approach, with a strong commitment to safety and professional development.

Bush Heritage Australia acknowledges the Aboriginal traditional owners of country.

Our values are:

Conservation: Protected, connected landscapes and waterways for plants, animals, and people

Culture: A shared journey of respect for diversity, each other, and acknowledgement of Traditional Owners' enduring relationship to this land and waters

Collaboration: We collaborate with Traditional Owners, other landowners, scientists, government, organisations, and communities for the greatest impact

Community: Together we are an active and dedicated mosaic of staff, volunteers, partners, and supporters all working for a common goal

Safety: Healthy people, healthy country

The organisation has eight teams – West Region; North Region; South East Region; Aboriginal Engagement; Strategy, Innovation & Business Development; Science & Conservation; Fundraising & Engagement; and Corporate Services.

CEO and the Board

Heather Campbell is Bush Heritage's Chief Executive. The Board Chair is Sue O'Connor, and Directors include leading Australians from business and commerce, government, conservation, and science. Bush Heritage demonstrates a strong commitment to Aboriginal and Torres Strait Islander people and has Aboriginal representation on its Board.

Direction and guidance for this position

Reporting to the Business Development and Strategic Project Manager, the Natural Capital Data Analyst is responsible for fulfilling the responsibilities associated with this position. As a self-starter, it is expected that the incumbent will openly collaborate, work to solve problems and contribute towards improving the effectiveness of our conservation data systems applicable to both Bush Heritage reserves, partner lands and agricultural lands of our partners and clients. This will include the analyse of conservation data and preparing conservation asset accounts and monitoring reports as well as developing new data workflows and supporting systems to automate these analyses and reports.

Position summary (background)

Bush Heritage's 2030 Strategy is to improve biodiversity protection, function and connectivity across landscapes. We will work in collaboration with farmers to improve biodiversity outcomes across 10 million ha of agricultural lands. To do this effectively across a number of engagement models, we require advanced data gathering, management and analyses to inform and drive improved biodiversity outcomes.

Bush Heritage seeks a skilled data analyst to develop the data structures, workflows and system design that will support natural capital analysis and reporting (primarily vegetation condition) including:

- Data definition and entity relationships for vegetation condition data within the context of BHA conservation systems
- Vegetation condition data collection, analysis and storage
- Data and project presentation and reporting
- Vegetation mapping and experimental design
- Other natural capital data and analysis depending on specific project scope

This data will fit within the existing Bush Heritage conservation data systems and inform vegetation condition methods across varied landscapes and reporting templates including:

- Bush Heritage's Accounting For Nature Veg Condition Account method (field based)
- MCF Farm Assessment of Grasslands (field based)
- Farm-Natural Capital verification - Natural Capital Accounting at farm scale (satellite and field based)
- Bush Heritage's AFN Integrated Veg Condition Account Method (satellite, UAV and field measures)

The Natural Capital Data Analyst will work with the Business Development and Strategic Project Manager and partner organisations and will be responsible for the workflows supporting the analysis of vegetation indicators from both remotely sensed data and on-ground observations for use in accounts aligned to the Accounting for Nature

framework and similar information State and Transitions vegetation data required for the development of Natural Capital Accounts.

This position will be required to work closely with external client parties and the Conservation and Science team to ensure integration of the dataflows with our existing science data systems.

This position may be required to communicate information concerning Bush Heritage's methods to other stakeholder scientific based individuals or organisations.

Key responsibilities and duties

Under direction from the Business Development and Strategic Project Manager, the Project Officer is developing workflows to analyse vegetation indicators derived from both Satellite, UAV data and onground observational data to compile accounts for various accounting frameworks (training to be provided – Accounting for Nature (AfN), Natural Capital Accounts (NCA), and Midlands Conservation Fund grassland reports (MCF) . This includes:

1. Development of data structures, workflows and system design that will support vegetation condition analysis and reporting including:
 - a. Data definition and entity relationships for vegetation condition data within the context of BHA conservation systems
 - b. Vegetation condition data collection, analysis and storage
 - c. Data and project presentation and reporting
 - d. Vegetation mapping and experimental design
2. Liaise with external clients (Climate Friendly, Integrated Futures, MCF) to design and deliver the above
3. Develop the data flows required to automate as much as possible the reporting of the data analysis in the required accounting formats (AFN, NCA, MCF)
4. Analyse data for individual accounts for either Bush Heritage or external clients as per requirements of each method. This will include
 - a. organisation of data into native vegetation accounts, including the writing of related Information Statements for each account or
 - b. to stratify properties, determine onground assessment sites and impute condition from onground assessment data
5. Report this data in the required formats with bespoke information statements as required for both Bush Heritage and external clients.
6. Collaborate with the Science and Conservation Team to ensure the data flows are compatible and integrate with existing scientific data systems of Bush Heritage.
7. Collaborate with the broader team and projects focused on Natural Capital in Agriculture
8. Assist the Business Development and Strategic Project Manager in technical discussions with industry and partners to inform and improve Bush Heritage' internal capacity and systems to deliver impact information for both Bush Heritage and external clients.

Qualifications, skills and selection criteria (used to assess your application)

Essential

- Commitment and passion for nature conservation and the objectives and values of Bush Heritage

- Demonstrated and practical experience in the design, implementation and technical analysis of ecological monitoring and survey programs using remotely sensed imagery
- Ability to communicate well in both written and oral forms, and experience in communicating highly technical information to less technical audiences
- Demonstrated ability to work both independently and also collaborate as part of a professional team member under both direct and remote supervision
- The candidate will have high level skills and knowledge in the following:
 - Experience in high-level data definition, ERD and process flows related to system design
 - Excellent analytical skills - the ability to identify trends, patterns and insights from data with a strong attention to detail
 - Intermediate understanding of databases such as SQL Server and related Azure Cloud Technologies
 - Understanding of reporting & data visualisation tools such as PowerBI
 - Understanding of scripting languages such as XML, Javascript, JSON, Python and R Suite.
 - Understanding of ETL framework and ETL tools such as Microsoft SSIS
- Additional experience with GIS Platforms and spatial analytics welcome
- Current drivers' licence

Desirable

- Experience in working with Traditional Owners

Policies and workplace practices

Bush Heritage people and managers are responsible for and commit to:

- Using and ensuring adherence to Bush Heritage's values, policies and work-place practices;
- Ensuring Health, Safety and Environment compliance, acting and encouraging others to act in a healthy and safe manner; and
- Maintaining a team-oriented environment, managing and developing staff, and valuing diversity.

Position Relationships

Position title of supervisor	Business Development and Strategic Project Manager
Position titles which also report to supervisor	-
Titles of positions that report to this position	-
Key internal relationships	Executive Manager Strategy, Innovation and Business Development; Agriculture Officer Senior Ecologist, Natural Capital in Agriculture Executive Manager North; Executive Manager Science and Conservation; Reserve Ecologists Spatial Information Coordinator;

Key external relationships	Climate Friendly, Integrated Futures, Tasmania Land Conservancy and the Midlands Conservation Fund, CSIRO, Commonwealth and State government staff and agencies, University researchers, project partners.
-----------------------------------	--