



CITY AND ENVIRONMENT DIRECTORATE (CED)

POSITION DESCRIPTION

POSITION DETAILS

Position title: Geospatial Data Engineer

Location: Hybrid Working Arrangements / Dickson ACT

Classification: Professional Officer Class 2 (PO2)

Reports to: Senior Spatial Ecologist

Position number: P65040

Date last reviewed: 10/06/2026

Division: Environment, Heritage and Parks

Position requirements: Tertiary qualifications in ecology, GIS or data engineering or similar field

Business unit: Office of Nature Conservation

DIRECTORATE OVERVIEW

The City and Environment Directorate (CED) brings together the people, services and systems that shape Canberra's future. We are a new directorate with a bold purpose: to deliver smarter, more connected services that respond to the needs of our Territory and community.

CED was established to align planning and transport, improve efficiency of development decisions, support environmental management, consolidate city services operations, and strengthen how government connects with the community. Our work spans the natural and built environments, city and transport services, and regulatory and customer service functions.

We are here to:

- Deliver streamlined, customer-focused services.
- Align planning, transport and environmental stewardship.
- Consolidate operations for greater efficiency and impact.
- Make government services more accessible, transparent and trusted.

At CED, we put people and place at the centre of everything we do. Whether shaping policy, maintaining public spaces, designing transport networks or supporting regulatory access, our people contribute to a connected, inclusive and resilient Canberra.

DIVISION OVERVIEW

The Environment, Heritage and Parks (EHP) Division delivers the following functions for the ACT government:



- Nature conservation policy, planning and delivery;
- Conservator support and traditional custodian engagement;
- Heritage conservation policy and regulation;
- Environment protection policy;
- Conservation research and evaluation;
- Management of Parks and Reserves;
- Fire and Forest Management; and
- Biosecurity policy and delivery.

Who we are

We are a diverse, innovative and professional team of people who come from a wide variety of backgrounds. We welcome people with experience from the community, public and private sectors and believe the more diverse our knowledge base is, the better our results will be. We value people with innovative and creative ideas, who communicate with candour and respect, and who have the motivation to drive projects from conception through to delivery. We are curious about each other's work and always ask "who else needs to know?"

What we offer

- Interesting and fulfilling work in a unique government environment where you can see the impact you have in working to protect Canberra's natural environment.
- The opportunity to work with passionate, innovative and experienced leaders who encourage and support you to develop your interests and expertise.
- A flexible workplace including hybrid work from home arrangements and state of the art accommodation enabling activity-based work.

BUSINESS UNIT OVERVIEW

Office of Nature Conservation

The Office of Nature Conservation (ONC) brings together policy, science, and data expertise to accelerate unified thinking and action to respond to the immense conservation challenges facing the ACT. The ONC focuses on an outcomes-based philosophy to guide and inform on-ground conservation efforts undertaken by ACT Parks and Conservation Services, volunteer environmental partners and the community. Through collaboration and engagement with a wide range of internal and external stakeholders, some of the ONC's responsibilities include delivering research, monitoring and evaluation programs focused on ACT biodiversity, threats and management interventions, providing expert advice on a range of ACT Government approval, licensing, operational and planning processes, advising on and implementing threatened species and ecological community recovery plans. While working collaboratively, the collection of experienced ecologists and technical experts in the ONC are organised into thematic teams with responsibilities for leading projects in a particular taxon (e.g. fauna), ecosystem (e.g. aquatic and riparian), process (e.g. fire), or technical (e.g. policy) area.

POSITION PURPOSE



The position sits within the Maps and Data team within ONC, which is a small specialist technical unit that provides GIS and data management support, and strategic data and digital advice, to ONC and the EHP Division. The purpose of the role is to deploy professional data skills and technical support for curation for both spatial and non-spatial biodiversity data, undertake spatial ecology and analysis, web GIS, data capture applications, metadata, and data engineering to support the Office of Nature Conservation thematic teams deliver on programs that support conservation and management of biodiversity.

DUTIES / RESPONSIBILITIES

Under limited direction, the successful applicant will deliver applied data management projects to support the improvement and integration of biodiversity data systems. Key responsibilities include:

- Deliver spatial and data projects using the Esri ArcGIS suite (ArcGIS Enterprise/Portal, enterprise geodatabases, ArcGIS Online, Survey123, Notebooks) and/or FME.
- Design, develop and manage spatial data capture and visualisation solutions (e.g. Survey123 Connect, Field Maps, ArcGIS Dashboards, Experience Builder) in collaboration with stakeholders.
- Apply and support ACT Government data governance standards and best practice data management.
- Provide GIS support, advice and training to Office of Nature Conservation staff.
- Build and maintain effective working relationships with internal and external stakeholders, including government agencies and partners.
- Uphold the ACTPS Code of Conduct and values, and ensure record-keeping complies with the Territory Records Act 2002.
- Undertake delegated responsibilities as a Conservation Officer under the Nature Conservation Act 2014.

SELECTION CRITERIA (CAPABILITIES)

Provide concise evidence of your **skills, knowledge and behaviours** against the duties above and the ACTPS Shared Capability Framework.

Skills

1. Demonstrated high-level experience in Geographic Information Systems (GIS), particularly using Esri ArcGIS platforms (ArcGIS Pro, ArcGIS Enterprise/Online) in designing and maintaining spatial databases. Proven ability to apply spatial analysis techniques to environmental or biodiversity datasets to support decision-making, reporting, and research outcomes.
2. Demonstrated experience using Safe Software FME or python to design, develop, and maintain automated data workflows. This includes extracting, transforming, validating, and loading (ETL) biodiversity and environmental datasets from multiple sources, ensuring data quality, consistency, and interoperability across systems.

Knowledge



3. Strong experience in the management, curation, and governance of biodiversity or ecological datasets, including species occurrence, habitat, and environmental data. Ability to apply data standards (e.g., Darwin Core or similar), metadata practices, and quality assurance processes to ensure datasets are discoverable, accurate, and fit for purpose.

Behaviour

4. Demonstrated ability to communicate technical spatial concepts effectively to a range of stakeholders, including scientists, policy makers, and non-technical users. Experience collaborating across multidisciplinary teams and eliciting requirements to improve data systems and tools.
5. Experience managing or contributing to projects involving spatial data systems, including planning, prioritisation, documentation, and delivery within timelines. Ability to maintain clear documentation of data workflows, schemas, and processes.
6. Demonstrated ability to consistently display commitment to the implementation of the principles of workplace diversity, participative work practices, workplace health and safety, and compliance with the requirements of the *Territory Records Act*.

COMPLIANCE REQUIREMENTS / QUALIFICATIONS

Tertiary qualifications in GIS, environmental science, ecology, geography, data science, or a related discipline.

Please refer to the advertising materials for information on how to apply.

Contact Officer

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WORK ENVIRONMENT DESCRIPTION

The following work environment description outlines the inherent requirements of the role and indicates how frequently each of these requirements would be performed. Please note that CED is committed to providing reasonable adjustment and ensuring all individuals have equal opportunities in the workplace.

ADMINISTRATIVE	FREQUENCY
Telephone use	Frequently
General computer use	Frequently
Extensive keying/data entry	Frequently
Graphical/analytical based	Frequently

Sitting at a desk	Frequently
Standing for long periods	Occasionally
Designated workstation	Never
<i>The position in an activity based work environment</i>	

STANDARD HOURS	FREQUENCY
Flexible working hours (access to flex time)	Frequently
Fixed or specified start/finish times	Occasionally
Expected to work extensive hours over a significant period due to the nature of the duties	Occasionally
Access to Accrued Days Off (ADO's)	Occasionally
Peaks and troughs	Occasionally
Frequent paid overtime	Occasionally
Rostered shift work	Never

SOCIAL DEMANDS	FREQUENCY
Work with others towards shared goals in a team environment	Frequently
Work in isolation from other staff (remote supervision)	Occasionally
Working in a call centre environment	Never
Working directly with the public	Occasionally

PHYSICAL DEMANDS	FREQUENCY
Distance walking (large buildings or inter-building transit)	Occasionally
Working outdoors	Occasionally

MANUAL HANDLING	FREQUENCY
Lifting 0 – 5kg	Occasionally
Lifting 5 – 10kg	Occasionally
Lifting 10kg+	Occasionally
Climbing	Occasionally
Reaching	Occasionally
Bending/squatting	Occasionally
Push/pull	Occasionally
Sequential repetitive movements in a short amount of time	Occasionally

TRAVEL	FREQUENCY
Frequent travel – multiple work sites	Occasionally
Frequent travel – driving	Occasionally
Frequent travel – interstate	Occasionally

SPECIFIC HAZARDS	FREQUENCY
Working at heights	Never

Exposure to extreme temperatures	Occasionally
Operation of heavy machinery e.g. forklift	Never
Confined spaces	Never
Excessive noise	Never
Low lighting	Occasionally
Handling of dangerous goods/equipment	Occasionally
Working with asbestos	Never
Potential to encounter agitated customers	Occasionally
Exposure to potentially distressing case material	Never

OTHER	FREQUENCY
Uniform required	Occasionally
Personal Protective Equipment (PPE) required	Occasionally