

Government of Western Australia Department of Water and Environmental Regulation

Spatial Role Matrix									
Spatial Services Analyst, Level 4	Spatial Environmental Analyst, Level 5	Spatial Environmental Analyst, Level 5							
Enterprise Data & Architecture	Native Vegetation Strategy	Terrestrial Ecosystem							
DWER's Geospatial data sets are some of the department's most critical assets. They are used to inform and evidence the department's regulatory, compliance and enforcement functions, as well as to enable vital science and planning capabilities that lead strategic policy development regarding future water and environmental resource protection outcomes. The Spatial Services Analyst is a member of the department's Geospatial Services Team that supports the delivery of highly specialised environmental impact assessment, water and environmental science, and strategic policy functions. The role implements data analysis, assists with the collection, creation and management of spatial data and provides expert guidance to the DWER officers and other internal and external stakeholders regarding the development, implementation, and delivery of spatial data services. The Spatial Services Analyst also assists with complex geospatial and big data analysis activities, as well as undertakes research to assist with investigations and projects	<ul> <li>The Spatial Environmental Analyst will provide specialist GIS advice and services, working within a dedicated team responsible for developing native vegetation extent mapping and related products for Western Australia (WA).</li> <li>The Spatial Environmental Analyst undertakes environmental data capture based on remote sensing and conducts complex geospatial and big data analysis activities to develop high quality data, web and print map products.</li> <li>The role works in collaboration with the team and stakeholders on a variety of operations and projects, contributing to better environmental policies, regional planning and management of native vegetation across the state, in consideration of the Native Vegetation Policy.</li> <li>We encourage people with transferrable skills and experience in one or more of the following areas to apply: Ecosystem mapping or carbon accounting, strategic conservation, forest management, land use planning or natural resource management A passion for</li> </ul>	The Spatial Environmental Analyst provides general support and is responsible for the operation and management of the Index of Biodiversity Surveys for Assessments (IBSA) and Index of Marine Surveys for Assessments (IMSA) databases. IBSA and IMSA captures terrestrial and marine biodiversity survey information submitted to the Department for assessments under the Environmental Protection Act 1986. The role implements processes and policies for information capture; reviews, indexes and stores the spatial data and reports; and operates the web portal that makes IBSA and IMSA data publicly available. The role supports the ongoing improvement of IBSA and IMSA, collaboration with external stakeholders, as well as the State's work to deliver related environmental information management services in future.							

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regarding the management of water and environmental issues.	improving environmental outcomes is highly valued.		
To be successful as a <b>Spatial Services</b> <b>Analyst</b> you will need to demonstrate the following requirements.	To be successful as a <b>Spatial Environmental</b> <b>Analyst</b> you will need to demonstrate the following requirements.	To be successful as a <b>Spatial Environmental</b> <b>Analyst</b> you will need to demonstrate the following requirements.	
Essential	Essential	Essential	
<ol> <li>Demonstrated experience in the use of GIS Desktop software (ArcGIS, QGIS).</li> <li>Demonstrated knowledge of GIS data structures, modelling tools and theory.</li> <li>Demonstrated ability to develop practical and innovative GIS solutions.</li> <li>4. Demonstrated high level written, oral, and interpersonal communication skills.</li> <li>Demonstrated experience creating graphic maps and other geospatial product visualisation methods.</li> <li>Demonstrated experience in providing GIS support and training.</li> </ol>	<ol> <li>Developed knowledge and experience with geospatial data, GIS data structures, modelling tools and theory, and experience using Desktop GIS applications (QGIS, ESRI ArcGIS, ArcMap or equivalent).</li> <li>Developed conceptual, analytical, and problem-solving skills and demonstrated ability to develop practical and innovative GIS solutions to complex projects.</li> <li>Developed communications skills with the demonstrated ability to present information clearly in both written and oral formats.</li> <li>Developed interpersonal and negotiations skills with the demonstrated ability to work within teams, foster collaborations, and develop productive working relationship with a range of stakeholders.</li> </ol>	<ol> <li>Knowledge and experience with geospatial data, desktop GIS applications (ESRI, ArcGIS Online, ArcMap or equivalent), and GIS data structures, including the ability to develop practical and innovative GIS solutions to complex projects.</li> <li>Experience in working with and converting different spatial data formats, along with experience in creating graphic maps and geospatial product visualisations.</li> <li>Demonstrated written and oral communication abilities, including developing procedures, work instructions, policies, and guidance related to GIS data standards, data submission, and information handling.</li> <li>Developed interpersonal, negotiation, and</li> </ol>	
Desirable	Desirable	collaboration skills, with experience	
<ul> <li>Tertiary qualification in GIS or an equivalent relevant discipline or experience in a relevant field.</li> <li>6.</li> </ul>	<ol> <li>Experience using GIS, geospatial information and/or remote sensing data for the management of natural resources and/or the environment outcomes.</li> <li>Tertiary qualification in Spatial Sciences,</li> </ol>	<ul> <li>5. Experience in workload and case management in GIS, IT, or data-based environments, with strong information</li> </ul>	

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<ol> <li>8. Experience using GIS for the management of natural resources or the environment.</li> <li>9. Python scripting and/or FME experience to</li> </ol>	_	GIS, Remote Sensing, Science, Natural Resources or related equivalent experience,		management skills and high general computer proficiency, including familiarity with cloud-based file storage and transfer.
aid workflow automation.	8.	Experience and ability to develop advanced procedures, techniques and standards to interpret, analyse and manage spatial information. Knowledge and familiarity with biodiversity datasets and issues associated with their publications, including experience in the analysis and display of raster datasets.	<b>De</b> 6. 7. 8. 9.	Tertiary qualification in GIS or an equivalent relevant discipline or experience in a relevant field. Experience using GIS for the management of natural resources or the environment. Experience with WA biodiversity, and/or a relevant qualification or training. Experience with environmental impact assessment.