**CLASSIFICATION:** SCIENTIFIC TECHNICAL



TITLE: GEOMATICS SPECIALIST, PRODUCTION

Officer 24

## **JOB OVERVIEW**

To provide specialist advice to senior ministry decision makers, and to technical and professional staff in the ministry, sector or industry on the use and interpretation of corporate data set(s). To maximize the potential of GIS and related geospatial and information technologies to support the business objectives of the program and its' clients. The position is part of the Remote Sensing and Geomatics Engineering Section (RSGE) of GeoBC.

#### **ACCOUNTABILITIES**

- Consults with interdisciplinary stakeholders and clients on priorities, improvements, and requirements
  related to data sets, data standards, processes and products which may impact their business needs;
  gather feedback, explain requirements and resolve issues.
- Works with other government agencies and geo-spatial data providers, industry, clients and stakeholders to ensure the provision of technical products that meet the needs of clients and users.
- Provides expert advice and guidance to technical and non-technical staff, internal and external
  agencies and clients on applied analytical and modelling methods, technologies, techniques,
  information and data management standards, data application and interpretation.
- Manages projects through working closely with client to develop project charter, establish terms of reference, priorities, and deliverables, identify resource requirements, monitor project progress, manage issues, and produce deliverables within timelines.
- Performs complex spatial and statistical analysis projects for strategic and legislative decision makers.
- Manages integration of appropriate expertise, knowledge, information and technology in delivering science-based solutions.
- Develops and maintains standards, specifications (LiDAR/imagery/UAS acquisition) for data QA/QC and data management plans for corporate spatial data products, data bases and/or data sets for a business area or client sector including risk assessments and mitigation strategies.
- Ensures the security, integrity, currency, compatibility and availability of data through the development and implementation of efficient, effective and economical quality assurance processes.
- Maintains awareness of and/or researches emerging issues, technologies and approaches related to spatial data and analysis methodologies and applications.
- Investigates emerging technology to determine potential implications and benefits and recommends approaches for integrating that technology into stakeholder business, including identifying standard functions, developing procedures to perform those functions and documenting their use.

Career Group: Job Family: Job Stream: Role: Revised:

- Establishes partnerships with other agencies, private sector, clients, contractors and universities to collaborate on studies and projects.
- Develops and/or delivers training for clients and staff on geo-technical, GIS and web mapping products, methods and production standards.
- Represents the branch on multi-stakeholder, intra-ministry committees and working groups and in conferences and workshops.
- Develops and/or supports the development of systems and tools that facilitate collection, management, analysis and reporting of spatial and attribute data.
- Develops and negotiates contracts, monitors performance and recommends payment.
- Manages inventory of hardware, software, systems tools and services and develops options recommendations and cost estimates for purchases.
- Leads the organization and maintenance of all metadata.
- Leads and manages the resolution of data-related problems related to system integration, compatibility and multiple platform integration.

### **JOB REQUIREMENTS**

- Diploma or higher in geomatics, surveying, remote sensing, geographic information systems (GIS), computer science, mathematics, physics, geography, resource management, or a related field.
   Preference may be given to a degree or higher.
- Experience developing methodologies and performing custom geo-spatial data modelling and/or complex statistical analysis and interpretations.
- Experience supporting and leading project teams.

## Preference may be given to applicants with any of the following experience with:

- Developing and managing large spatial and attribute data sets (e.g. digital imagery, LiDAR, inSAR).
- Database management tools.
- Managing geospatial projects (procurement, acquisition, production and QA/QC).
- LiDAR post-processing and/or equivalent classification software. For example: LasTools, GlobalMapper, TerraSolid suite of desktop applications (TerraScan, TerraMatch, TerraModel), FUSION, Cloud Compare, PDAL, LidR.
- Automating or scripting solutions for complex analyses or repetitive tasks using tools such as Python, or other programming languages.
- Remote sensing and geospatial software applications such as ENVI and Ecognition.
- Developing, explaining, and presenting findings, reports and summaries of results both verbally and in writing, in a clear and concise style that is appropriate to the audience.
- Artificial Intelligence applied to remote sensing.
- More years of experience in the above statements.

 Career Group:
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 Role:
 Revised:

 Scientific and Technical
 Geomatics
 Professional
 2023-07-10

Successful completion of security screening requirements of the BC Public Service, which may include a criminal records check, and/or Criminal Records Review Act (CRRA) check, and/or enhanced security screening checks as required by the ministry (Note: It is important that you read the job posting carefully to understand the specific security screening requirements pertaining to the position).

# KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of BC forest inventories, including the Vegetation Resources Inventory (VRI) and the LiDAR enhanced forest inventory
- Effective written and verbal communication skills.
- Geographic Information Systems, Remote Sensing, Survey principles and practices.

#### **BEHAVIOURAL COMPETENCIES**

- Analytical Thinking is the ability to comprehend a situation by breaking it down into its components
  and identifying key or underlying complex issues. It implies the ability to systematically organize and
  compare the various aspects of a problem or situation, and determine cause-and-effect relationships
  ("if...then...") to resolve problems in a sound, decisive manner. Checks to ensure the validity or
  accuracy of all information.
- Concern for Order reflects an underlying drive to reduce uncertainty in the surrounding environment.
   It is expressed as monitoring and checking work or information, insisting on clarity of roles and functions, etc.
- **Continuous Development** involves proactively taking actions to improve personal capability to meet organizational goals. It involves being willing to assess one's level of development, expertise and performance relative to one's current job, or as part of focused career planning.
- Planning, Organizing and Coordinating involves proactively planning, establishing priorities and allocating resources. It is expressed by developing and implementing increasingly complex plans. It also involves monitoring and adjusting work to accomplish goals and deliver to the organization's mandate.
- **Teamwork and Cooperation** is the ability to work co-operatively within diverse teams, work groups and across the organization to achieve group and organizational goals. It includes the desire and ability to understand and respond effectively to other people from diverse backgrounds with diverse views.
- Initiative involves identifying a problem, obstacle or opportunity and taking appropriate action to
  address current or future problems or opportunities. As such, initiative can be seen in the context of
  proactively doing things and not simply thinking about future actions. Formal strategic planning is not
  included in this competency.
- Results Orientation is a concern for surpassing a standard of excellence. The standard may be one's own past performance (striving for improvement); an objective measure (achievement orientation); challenging goals that one has set; or even improving or surpassing what has already been done (continuous improvement). Thus, a unique accomplishment also indicates a Results Orientation.

## INDIGENOUS RELATIONS BEHAVIOURAL COMPETENCIES

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about behavioural interviews, competency definitions, and to watch interview videos, please visit: <u>Competencies in the BC Public Service</u>									
The competencies listed above complement the required accountabilities for this position. For more information									
	become difficu	lt or uncertain, or in ti	mes of urgency.						
				ways of thinking and a	cting w	hen situations			
				ing a way forward that					
				their origins, through r					
	_		_	thoughts, feelings, valuationship, or how they		_			
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Geomatics Protessional