BRITISH COLUMBIA
BC Public Service
Where ideas work

TITLE: GIS MAPPING TECHNICIAN   **CLASSIFICATION: STO 18**

JOB OVERVIEW

The GIS Mapping Technician creates digital, graphic and descriptive products to support resource planning through the use of GIS. The GIS Mapping Technician supports planning and operational initiatives through data input, manipulation, and quality control as well as map production and generation of associated reports for GIS analysis to provide insight into resource management.

ACCOUNTABILITIES

- Creates, develops and maintains spatial and attribute data bases used in Geographic Information System (GIS) applications, relational database management (RDBM) systems and other corporate business systems (FTA, Results, etc).

- Populates, maintains data integrity, secure access to restricted data, maintains linkages between data bases and updates data bases as information becomes available.

- Translates, integrates and manipulates data from various sources and formats to government standards.

- Conducts quality assurance on digital products and deliverables to ensure technical standards are met, verifies and checks input data to ensure continuity, integrity and compliance with standards; compiles, enhances, and digitizes source information to create various resource themes, data bases, spatial products and related models.

- Conducts quality control checks to ensure end user product reliability and validity. (Provides specifications for databases from contracts and consults with or provides verified information to data providers to resolve data anomalies and performs data capture from source documents.

- Produces spatial products, terrain models, graphics, and descriptive statistics and write technical reports and manuals.

- Operates multiple GIS related software, RDBM systems and corporate business applications to manipulate spatial and attribute data to produce spatial analysis products.

- 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, and minimize duplication in the development of output products.

- Imports files of published maps and inspects for content and cartographic design and quality; identifies and resolves technical conflicts through editing functions.

Optional:

- Completes land status, performs adjudication and makes recommendations based on knowledge of business practices, legislation and policy.

- Contributes to spatial technology standards and procedures to support integrity, security and transferability of data and coordinating processes for quality assurance and archiving, write visual output standards, and in-house spatial data and attribute management procedures.

- Assists in the requirements gathering, testing and evaluation of GIS related hardware and software.

- Develops and/or delivers training for clients and staff on geo-technical, GIS and web mapping products, methods, standards, various corporate business systems and business processes.

- Maintains awareness of and/or researches emerging issues, technologies and approaches related to spatial data and analysis methodologies and applications.

- Assist with preparation of contracts, monitors performance and signs off on the goods and services.

JOB REQUIREMENTS

- Diploma or degree in geographic information systems, or in relate field, such as natural resources or geography and one year (gained within the last three years) of related experience.

  Or

- Equivalent combination of training and three years (gained within the last five years) related experience.

- Experience capturing, converting, creating, editing and maintaining digital information in a GIS environment.

- Experience creating a variety of digital, geographical and descriptive products including thematic maps, terrain models and associated descriptive statistics.

- 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).**

PREFERENCE STATEMENTS

- Experience working with a forestry-related application that incorporates ESRI (ArcGIS) software products.

- Experience working with ESRI (ArcGIS) software products.

- Operational forestry experience.

KNOWLEDGE, SKILLS AND ABILITIES

- Basic knowledge of the structures and mandates of the Ministry of Forests, Lands and Natural Resource Operations and BC Timber Sales.

- Knowledge of general theories, principles and standards of cartography such as layout and design principles.

- Knowledge of mapping systems and processes such as map projections, scale measurement, map compilation, reproduction methods, photo and satellite interpretation.

- Ability to use ESRI (ArcGIS) software to apply quality assurance processes to data, perform data input and editing functions and produce quality cartographic products.

- Ability to use and maintain a broad variety of mapping and design hardware, software and other equipment to create themes, colour thematic maps, terrain models and develop reports.

- Ability to integrate data and information from a variety of sources to produce maps and other graphic materials.

- Ability to manage and complete multiple tasks in a timely and effective manner.

- Ability to work independently and to interpret and follow written and verbal instruction.

- Ability to communicate clearly and effectively both verbally and in writing.

BEHAVIOURAL COMPETENCIES:

- Business Acumen is the ability to understand the business implications of decisions and the ability to strive to improve organizational performance. It requires an awareness of business issues, processes and outcomes as they impact the client's and the organization's business needs. (L1)

- Flexibility is the ability and willingness to adapt to and work effectively within a variety of diverse situations, and with diverse individuals or groups. Flexibility entails understanding and appreciating different and opposing perspectives on an issue, adapting one's approach as situations change and accepting changes within one's own job or organization. (L2)

- Information Seeking is driven by a desire to know more about things, people or issues. It implies going beyond the questions that are routine or required in the job. It may include "digging" or pressing for exact information; resolution of discrepancies by asking a series of questions; or less-focused environmental "scanning" for potential opportunities or miscellaneous information that may be of future use. (L1)

- 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. (L1)

- Problem Solving/Judgment is the ability to analyze problems systematically, organize information, identify key factors, identify underlying causes and generate solutions. (L2)

- 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. (L3)

- Service Orientation implies a desire to identify and serve customers/clients, who may include the public, co-workers, other branches/divisions, other ministries/agencies, other government organizations, and non-government organizations. It means focusing one's efforts on discovering and meeting the needs of the customer/client. (L3)

- 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. (L3)