

NON-MANAGEMENT JOB DESCRIPTION POINT RATING EVALUATION PLAN

Working Title Environmental GIS Analyst		Name Vacant	
Position Number	Reports to Position No., Class & Level NR8	Division, Branch/Unit Strategy and Governance, Operational Services Branch, Provincial Geospatial Centre	Ministry Environment and Protected Areas
Present Class Program Service 3		Requested Class	
Dept ID	Program Code	Project Code (if applicable)	

PURPOSE: Give a brief summary of the job, covering the main responsibilities, the framework within which the job has to operate and the main contribution to the organization (see Non-Management Job Description Writing Guide [Pages 7-8](#)).

The Provincial Geospatial Centre (PGC) maintains the Spatial Data Infrastructure (SDI) for the province and is a central hub for geospatial best practices, products, technologies, procurement, and distribution.

This position is responsible for the creation, maintenance, and documentation of datasets relating to the management of ecosystem components that comprise Alberta's landscapes such as wetlands, hydrology, landforms, fisheries, aquatic ecology, vegetation and soils, with an emphasis on hydrological datasets. These data themes are fundamental to land-based activities in Alberta. This role ensures that the government and public clients have trustworthy, accessible, and up to date information which is made available for use in a variety of downstream applications. Reporting to the program lead, the Environmental GIS Analyst provides a full complement of skills to manage and modernize these foundational datasets.

RESPONSIBILITIES AND ACTIVITIES: The purpose of the job can be broken down in different responsibilities and end results. Each end result shows what the job is accountable for, within what framework and what the added value is. Normally a job has 4-8 core end results. For each end result, approximately 3-6 activities should be described (see Writing Guide [Pages 9-10](#)).

AUTHORITATIVE BIOPHYSICAL DATASETS

Ensure the PGC's foundational biophysical spatial datasets are created and maintained in accordance with applicable legislation, regulations, policies, standards, and processes by:

- investigating requests and concerns regarding foundational datasets.
- supporting the creation and maintenance of datasets.
- ensuring new policy requirements are incorporated in quality assurance methodologies.
- auditing, evaluating, analyzing, and reviewing contractor returns in quality control workflows.
- leveraging satellite and aerial photography to enhance the depth and scope of foundational datasets.
- documenting methodologies and processes used in checking, creating, and updating foundational datasets and creating/updating metadata records.

CLIENT SUPPORT & GUIDANCE

Support the lead in responding to technical inquiries/requests related to biophysical datasets to ensure client needs are met by:

- maintaining awareness of relevant initiatives underway in other ministries (e.g., new policies, guidelines or land management strategies in Alberta);
- participating in working groups involved in the creation and maintenance of foundational datasets.
- implementing solutions for improving quality and completeness of foundational datasets.
- providing technical guidance and communication on the impact of any changes, improvements, or deprecations of datasets to minimize impact on stakeholders.

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PROGRAM ADVANCEMENT

Participate in the development and/or improvement of standards, processes, and products, within the program to ensure efficiency and modernization of foundational datasets by:

- regularly reviewing existing standards and processes and identifying areas for improvement.
- recommending and testing new methodologies and processes to streamline creation, maintenance, and verification/checking of foundational datasets.
- testing, evaluating and providing technical feedback for new processes, technologies, or software used for updating foundational datasets.
- maintaining awareness of trends and industry best practices to support the Wetlands and Hydrography program.

PROGRAM CAPACITY

Provide operational support to ensure timelines and schedules for existing projects are met and scheduling is optimized to meet demand for new project requests within the PGC by:

- maintaining a common standard with the foundational datasets maintained by the PGC.
- assisting with audits and quality control of incoming contract returns.
- supporting data loading and cataloguing of spatial data products.
- providing support for clean-up and organizing of data assets in accordance with existing standards and procedures.
- providing support on Cartographic, and Imagery datasets as required.

SCOPE: List specific information that illustrates the challenges, problem solving and creativity requirements and decision making capacity of the position. Also identify the internal or external areas the job impacts (see Writing Guide [Pages 11-12](#)).

The position works with the program lead to support ministry clients in the maintenance and integration of foundational geospatial datasets. Reporting to the lead, the position is responsible for quality control on contractor returns and finding effective solutions to business related needs. Testing solutions and implementing new methodologies and processes requires a strong background in geospatial tools and data, including a knowledge of ArcGIS, base mapping datasets, remote sensing data interpretation, and applicable standards of practice.

The position is responsible for the day-to-day processing and updates to foundational datasets. The Environmental GIS Analyst supports the lead in fulfilling program and project requests and modernizing processes as well as working with stakeholders. The role works with the entire PGC team to maintain procedures, communicate changes, and resolve administrative and operational issues.

KNOWLEDGE, SKILLS & ABILITIES: Include information on required diplomas and degrees along with identifying the most important knowledge factors, including knowledge about practical procedures, administrative, technical or professional techniques, technical, scientific or program related processes, etc. Detail specific training if there is an occupational certification/registration requirement for the position. Specify the type of experience required for the position (see Writing Guide [Pages 12-14](#)).

This position requires a 4-year degree plus 2 years of work experience in a natural science field with an emphasis on geographic information systems (GIS). This position requires demonstrated proficiency in data capture, scientific analysis and the management of environment and natural resources information using Geographic Information System (GIS) software such as ESRI ArcGIS in an enterprise environment.

The position requires experience with understanding and interpretation of specifications, remote sensing interpretation, geospatial data formats, geo-referencing, aerial photography, geospatial metadata, digitizing, software, and mapping to enable the candidate to work effectively with existing datasets and software.

The position benefits from a knowledge and understanding of the GoA's geospatial policies, tools, and foundational datasets, to support Alberta's Spatial Data Infrastructure to ensure trustworthy foundational datasets remain available to the Government and the public...

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This position requires experience working with wetland, hydrology, aquatic ecology, landform, vegetation and soils data. In addition, working with Alberta's water policies, environmental management systems, would be an asset.

This role requires excellent communication, time management, and analytical skills to track and resolve outstanding issues, identify solutions, and provide support by collecting requirements, completing analysis, and recommending options

CONTACTS: Identify the main contacts the position communicates with and the purpose of the communication (See Writing Guide [Pages 14-15](#)).

This position interacts daily with the PGC team to ensure the team is up to date on client requests and progress on ongoing work.

The incumbent interacts regularly with internal and external ministry clients to gather requirements, notify on updates, identify issues, and to provide support and advice.

This position regularly interacts with management and GIS governing bodies to provide advice and communicate learnings.

This position interacts occasionally with senior management and other groups and committees to learn about and align with GoA standards, policies, and best practices.

SUPERVISION EXERCISED: List position numbers, class titles, and working titles of positions directly supervised (see Writing Guide [Page 15](#))

N/A

CHANGES SINCE LAST CLASSIFICATION REVIEW: Identify significant changes that have impacted the responsibilities assigned to your position since the last review (see Writing Guide [Pages 15-16](#)).

N/A

This information is being collected under the authority of Section 10 of the Public Service Act and will be used to allocate positions within a classification plan and to manage the Alberta government human resources program. If you have any questions about the collection of this information, contact the Job Evaluation Unit, 6th Floor, Peace Hills Trust Tower, 10011 - 109 Street, Edmonton, Alberta, T5J 3S8, phone 780/408-8400 or contact your Ministry Human Resource Office.