



## Spatial Analyst

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### *The Organization*

The Whitebark Pine Ecosystem Foundation of Canada (WPEFC) is a registered non-profit society in BC and Alberta, devoted to the conservation and stewardship of whitebark and limber pine. Through partnerships, science-based active management, restoration, research, and education, we aim to recover these endangered ecosystems.

### *Position Description*

WPEFC is hiring an experienced contract Spatial Analyst for 10 to 20 hours per week to assemble and analyze spatial data to develop spatially-explicit restoration plans for whitebark and limber pine ecosystems in the Rocky Mountains and Foothills of Canada. Ideally, this term starts in Winter 2022 with deliverables due March 2023 and with the possibility of extension for up to five years.

**Should the applicant individual or firm fulfill all qualifications, they may fulfill both [Project Manager](#) and Spatial Analyst roles.**

### The project consists of two phases:

The first phase of the project consists of compiling and standardizing data sources to support development of a spatial restoration plan for whitebark and limber pine throughout the project area. The methodology will follow the steps and outcomes for the [pilot project for 3 areas in the Crown of the Continent region](#) and the [expanded project encompassing the entire Crown of the Continent Ecosystem](#). The [Project Manager](#) will work closely with the Spatial Analyst on this phase. Key responsibilities include ensuring the project is on track and progressing, given variability in the availability, completeness, and quality of data sources, and the availability of project team members. Project data sources and parameters will be shared for review periodically with stakeholders. Final spatial deliverables and a project report will be reviewed with stakeholders.

Phase 2 lasts approximately 4.5 years and consists of applying these products to develop and support implementation of spatial restoration plans and activities across the project area, in collaboration with the Project Manager and WPEFC managers. The Spatial Analyst will support

the Project Manager's spatial data needs for reporting, budgeting, project implementation, and data sharing with partners. The workload for this phase is considerably less and focuses more on data compilation and visualization than during Phase 1.

### *Responsibilities of this Role*

- Acquire and assimilate data, following and adapting the methodology described in the above links
- Participate in weekly scheduled meetings including online platform visualization with the Project Manager and project team, as well as with the broader stakeholder group meeting at 4 to 6 week intervals
- Provide bi-weekly progress reports
- Produce well documented and reusable code defining the spatial model(s), as well as maps

### *Mandatory Qualifications & Capacities*

- Degree or advanced technical diploma in geomatics, resource management, geography, computer science, or related field, plus 3 years of advanced spatial analysis and modelling experience
- Demonstrated proficiency and access to appropriate software for mapping and spatial modelling (ArcGIS, QGIS, R, Python, Google Earth Engine, etc.)
- Expertise in efficiently sourcing and amalgamating raw spatial and non-spatial data from multiple sources, and converting into useable, clean formats that can be modelled, integrated, and distributed
- Demonstrated experience with database management to administer and integrate large amounts of spatial and attribute data
- Able to integrate new spatial data into existing models
- Able to adapt or develop new methodologies and scripting for custom geospatial modeling, analysis, and interpretation based on project needs
- Experience conducting sensitivity analyses to develop and set model parameters in collaboration with project team
- Cartographic skills to display complex information in user-friendly formats on or compatible with multiple platforms (e.g. ArcPro, QGIS, PDF layers, KMZ, mobile and web-based platforms)
- Adheres to deadlines and project expectations set by the Project Manager
- Excellent organizational skills, including attention to detail, excellent file management and documentation skills, and ability to multitask
- Team player with a positive demeanor who is willing to collaborate with partners from different sectors, including First Nations
- Respectfully accepts and incorporates feedback into models and documents rationales and model parameters and scripts





- Strong visualization and verbal communication skills to support meeting progress and include in professional reports

### *Compensation*

- Rate is commensurate with experience and demonstrated success. This is a contract position; please list state your hourly rate, inclusive of operating expenses; excluding travel.
- WPEFC will provide accounts for Zoom and other platforms. Contact us for details or if you have questions.

### *Insurance requirement*

- The Contractor will purchase and maintain, at their own expense, throughout the term of this Agreement the following insurances with insurers licensed in Canada:
- Comprehensive General Liability in an amount not less than \$2,000,000 inclusive per occurrence against bodily injury, personal injury and property damage and including liability assumed under this Agreement.
- Adequately insured, reliable vehicle. Automobile Liability on all vehicles owned, operated or licensed by you in an amount not less than \$2,000,000 per occurrence and appropriate vehicle insurance for travel related to work.
- Workers Compensation Board / WorkSafe Registration Number in good standing.

### *Application Requirements*

Submit a CV and a list of specific examples of related experience. Include links to at least two projects illustrating how you and/or your team meet the specific expertise listed above.

Please include a bid-rate breakdown and supply three references that can provide examples of the above qualifications.

This posting will remain open until a suitable candidate is found. Applications can be sent to [hr@whitebarkpine.ca](mailto:hr@whitebarkpine.ca)