

**JOB DESCRIPTION**

<b>Position Title</b>	GIS Technician
<b>Department</b>	Permanent Full-time
<b>Reports to</b>	GIS Program Manager
<b>Compensation</b>	DOE/Q
<b>Classification</b>	Technical

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**Summary of Duties and Responsibilities**

Under the general direction of the Coeur d'Alene Tribe's GIS Manager and the Senior GIS Analyst, the incumbent performs technical work in the acquisition, maintenance and dissemination of digital geographic data of any complexity received from multiple sources. Work requires setting priorities and coordinating work activities to meet schedules.

Duties include specific tasks within seven areas of responsibility:

- (1) Finding, gathering, inputting and outputting data in a variety of usable formats
- (2) Maintenance of existing data by means of direct editing and spatial analysis
- (3) ArcGIS Enterprise/Portal map and app development for the group and other programs within the Tribe
- (4) Cartographic production in paper and digital formats
- (5) Maintenance of the GIS Program budgets
- (6) Installation and support of ArcGIS Desktop software for users outside the GIS Program
- (7) Unmanned Aerial Systems (UAS) operations

Work load ranges from moderate to heavy. Scope of the work is Tribal-wide, although it may include work for other tribal governments, state and federal agencies, and the public. The organizational environment is hierarchical similar to organizations such as tribal, federal or state agencies, or the military. Work is conducted both in a normal office setting, outdoors under a variety of weather conditions, in a vehicle on a range of road surfaces including four-wheel-drive conditions. Noise level is moderate to loud, depending upon the employee's location. At times, duties may require field work using GPS and UAS equipment in and near roadways and in remote roadless areas. This could include field operations during periods of extreme weather consisting of either summer (heat) or winter (snow, cold, negative wind chill, etc.) conditions. There is occasional lifting of computers and UAS's and their components weighing up to 70 lbs.

**Duties and Responsibilities**

- Coordinates technical GIS projects to achieve desired goals with available resources. Plans and organizes individual work, and reports on progress. Makes recommendations and implements changes as needed.
- Uses ArcGIS Desktop and Online software (ArcMap, ArcGIS Pro, ArcCatalog and ArcGIS Portal/Online) to edit, create and manage GIS data (point, line, polygon, raster image, multipatch/3D).
- Produces conventional and digital maps and develops web applications for GIS and

- other departments and contracts as needed.
- Understands and performs GIS database creation and maintenance
- Helps maintain quality control measures for projects
- Creates and maintains metadata
- Participates in gathering and/or compiling data for special research, formatting and designing and performing analyses
- Photographs and gathers GPS locational data of natural and man-made features
- Assists the Senior GIS Analyst in managing the Tribe's UAS Program
  - Assists in managing the Unmanned Aerial Systems (UAS. aka UAV's, "drones") and ancillary hardware, and software used in flight programming and data collection
  - Assists in planning aerial imagery acquisition schedule for Tribal lands to be monitored by the UAS's
  - Using the appropriate software, creates flight missions for both the fix-wing and rotary based autopilots
  - Safely conducts UAS flights in the field on Tribal lands within the Coeur d'Alene Reservation in compliance with Tribal rules and the FAA regulations
  - Downloads collected imagery from the UAS cameras, geotag and process into usable raster layers
  - Assists in managing the UAS imagery library
- Provides technical assistance to GIS Analyst and to other program GIS users
- Installs GIS software and keeps track of those installations and users; maintains user data access and outside data requests legal agreements
- Orders quotes and supplies from various vendors as needed
- Assists the GIS Manager with preparation and maintenance of GIS budgets
- Attends and gives presentations at conferences, seminars, workshops and other professional opportunities to maintain the necessary level of GIS expertise
- Plans and coordinates work activities, and establishes and maintains effective working relationships with Tribal officials, Tribal staff, other jurisdictions and the public
- Helps write and submit grants
- Prepares technical reports and materials for use in presentations
- Must show the highest of professional standards and promotes a positive image of the Tribe and its administration at all times.
- Perform other duties as assigned to promote the efficiency and effectiveness of the department.

### **Minimum Qualifications**

- Must support the Coeur d'Alene Tribe's: vision, mission, and core values per Cda Resolution 015(2020).
- Must have received full COVID19 vaccination with booster, at the time of application,
- Must comply with all other Health policies established by the Tribe or department,
- No offenses related to dishonesty or theft
- Skill in planning and coordinating work activities, and establishing and maintaining effective working relationships with Tribal officials, Tribal staff, other jurisdictions and

the public

- Coursework towards a four-year degree in geography or natural resource type degree with at least three classes in GIS and or cartography, completion of a GIS Certificate Program or equivalent work experience
- Two years' work experience in GIS related field desired
- Ability to meet attendance schedule with dependability and consistency
- Knowledge of ArcGIS 10.x, ArcGIS Pro and ArcGIS Online software to make paper and digital maps and applications, and to input data
- Knowledge and experience working in an online environment, i.e. ArcGIS Online or ArcGIS Enterprise/Portal
- Understands geographic data types and geodatabase structure and behavior
- Basic knowledge of the principles and practices of cartography and geographic analyses
- Skill in interpreting and utilizing current geographic information pertaining to work assignments
- Knowledge and experience editing all vector data topologies
- Knowledge and experience editing linear topologies
- Knowledge and experience in vector, as well as raster analysis
- Knowledge and experience using GPS equipment
- Knowledge of Microsoft Windows operating system.
- Skill in operating advanced computer workstations utilizing GIS related software packages.
- Experience with commercial UAS industry desired
- 1+ years of RC (Radio Controlled) aircraft pilot experience with excellent coordination and execution desired
- Capable of obtaining a CFR Part 107 Remote Pilot Certificate
- Experience with FAA rules and regulations, including 14 CFR Part 107 Valid Driver's License
- Knowledge and experience writing and submitting grants
- Knowledge of and experience using Microsoft Office Word, Excel, PowerPoint, Publisher, Access, Outlook and Adobe Photoshop
- Knowledge in bookkeeping, maintaining budgets and billing
- Excellent communications and reporting skills
- Knowledge and experience writing and submitting grants
- Must pass GIS skills test

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An applicant may be asked to participate in an interview to establish whether he/she meets the minimum qualifications. Interviews do not create a right to employment and provide no promise or guarantee of employment with the Tribe.

The Coeur d'Alene Tribe reserves the right to hire according to its Indian Preference Policy. Applicants are subject to a pre-employment drug test and at-random testing following employment. Positions with the Coeur d'Alene Tribe are subject to a 6-month orientation period.

To apply, **submit a Tribal Application, resume, COVID19 vaccination card with booster, answers to the KSA questions, and signed position description no later than 4:00 pm on the closing**

**date to:** Human Resources Department, P.O. Box 408, Plummer, ID 83851. For more information, visit our website at [www.cdatribe-nsn.gov](http://www.cdatribe-nsn.gov)

Sign below stating you have read the above job description and fully understand the qualifications, duties and responsibilities required of this position. Return this job description with the application and your resume.

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Applicant Signature

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Date

**GIS Technician knowledge, skills and abilities (KSA) Questions**

Please be as specific and detailed as possible with your answers.

1. What is your formal training in GIS?
2. What types of data editing have you done?
3. What experience do you have using ESRI's ArcGIS Desktop software – ArcMap, ArcGIS Pro?
4. Tell us about your most complex GIS project?
5. What experience do you have collecting field data using a GPS unit?
6. What experience do you have with cadastral data?
7. Describe your experience with Unmanned Aerial Systems (UAS, aka "drones", UAV's).