YUROK TRIBE-JOB DESCRIPTION
Geospatial Analyst/Surveyor

Job Title: Geospatial Analyst/Surveyor III
Job Grade: 12/13
FLSA Status: Exempt
Location: Arcata, CA

Department: Fisheries-Design Construction Program
Division: Natural Resources
Reports To: Survey Manager/Senior Engineer

Salary Range: $79,913-$104,270/$94,099-$122,761

ALL HIRING IS SUBJECT TO THE YUROK TRIBE’S HIRING PREFERENCE

POSITION SUMMARY:

Incumbent is under the direct supervision of the Survey Manager or Senior Engineer and works to guide the selection and implementation of equipment, workflows and methodologies while also supporting the technical acquisition specialists. This position requires and in-depth knowledge of topography and bathymetry to plan, execute and document projects to applicable standards and specifications. The analyst/Surveyor provides oversight to technicians and other analysts/surveyors on various projects to support data acquisition, extraction, and review of raw data while maintaining a high level of quality assurance and quality control. The analyst is required to produce consistent finished work products. The successful incumbent will be a creative, problem-solver who strives to develop process efficiencies and improve methodologies. This position requires 25 percent in the field and 75 percent office time but will vary depending on experience and current needs. Field work will include managing installations, calibrations and project setup through data collection to demobilization. Field surveys may include managing or assisting technicians with acquisition using various remote sensing technologies from boats, aircrafts, and UAV’s. Office duties will be carried out remotely and occasionally onsite at the Arcata office as needed.

DUTIES AND RESPONSIBILITIES:

1. Planning of boat and aerial based remote sensing missions.
2. Assist with boat and aerial based remote sensing acquisitions.
3. Workflow design and implementation for topographic and bathymetric data processing.
4. Standards and specifications development for topographic and bathymetric projects.
5. Equipment selection, acceptance testing, installation and calibration for topographic and bathymetric projects.
6. Extraction of raw remotely sensed data
7. Quality and completeness checks of data post acquisition.
8. Trajectory processing and data review
9. Performing adjustments to remotely sensed data based on field observations.
10. Post processing of conventional survey data and remotely sensed survey data.
11. Classification of LiDAR and Photogrammetric datasets.
12. Integration of conventional and remotely sensed data sets to produce digital elevation models.
14. May be assigned other duties as required to meet the needs of the organization.

SUPERVISORY RESPONSIBILITIES:

Supervises Geospatial Analyst/Surveyor I and II positions as well as other technical acquisition and processing staff.
MINIMUM QUALIFICATIONS:

1. Bachelor’s degree in surveying, geomatics, or related engineering program.
3. Registered Professional Land Surveyor (PLS) with the ability to obtain and maintain a California license.
4. Detailed technical understanding of sonar (multibeam and singlebeam), LiDAR (topographic and bathymetric), and photogrammetric remote sensing systems.
5. Applied experience with sonar (multibeam and singlebeam), LiDAR (topographic and bathymetric), and photogrammetric technologies and data quality considerations.
6. Detailed knowledge and understanding of horizontal and vertical coordinate reference systems and datum transformations.
7. Experience with data processing and remote sensing software packages such as RiProcess, PosPAC, Inertial Explorer, Trimble Business Center, HyPack, Caris HIPS, Terrasolid, LASTools, LP360, Cloud Compare, AutoCAD, ArcGIS, etc.
8. Experience in the development and implementation of algorithms (Scripts/Models/Macros) as it pertains to automating processes and increasing efficiencies.
9. Expertise in LiDAR classification, data aggregation, statistical analysis, quality assurance, assessment, and reporting.
10. An ability to operate boat and airborne based mapping equipment, occasionally for consecutive days in remote and strenuous locations.
11. High attention to detail and the ability to consistently produce high quality data products with minimal supervision.
12. Ability to obtain and maintain a Remote Pilot Certificate (Part 107) license.
13. Able to work and think independently.
14. Able to problem solve and make sound independent decisions.
15. Possess a strong work ethic, be energetic, and dedicated.
16. Have excellent verbal and written communication skills

EDUCATION/EXPERIENCE:

Bachelor’s degree in surveying, geomatics, or related engineering program and ten (10) plus years applicable experience at a responsible charge level in topographic and bathymetric projects.

Ability to provide portfolio of past projects that demonstrates responsibilities, technical and reporting experience.

CONDITIONS OF EMPLOYMENT:

1. All applicants are subject to the Tribe’s Drug and Alcohol Policy including pre-employment screening.
2. May be subject to a comprehensive background check.
3. All applicants will acknowledge and follow all Yurok Tribe personnel and other policies and procedures.
4. The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.
5. Must have a valid state issued driver’s license (CA, OR, or WA) and be insurable on the Tribe’s insurance policy.
6. LANGUAGE SKILLS: Must have the ability to read, write and comprehend simple instructions, short correspondence, and memos. With ability to effectively present information in one-on-one and small group situations to customers, clients, and other employees of the organization.

7. REASONING ABILITY: Apply common sense understanding to carry out instructions furnished in written, oral and/or diagram form with ability to deal with problems involving several concrete variables in standardized situations and/or the ability to think “on the fly” using situational awareness.

8. PHYSICAL DEMANDS: While performing the duties of this job, the employee is frequently required to walk, stand and use hands to finger, handle, or feel. The employee is required to sit, reach with hands and arms, climb or balance, stoop, kneel, crouch, or crawl, talk and hear. The employee must occasionally lift and/or move up to 50 pounds, have stamina and sufficient physical ability and dexterity to accomplish fieldwork that includes strenuous exertion, inclement weather and long hours in the field.

9. VISION REQUIREMENTS:
   - Close vision (clear vision at 20 inches or less).
   - Color vision (ability to identify and distinguish colors).
   - Depth perception (three-dimensional vision, ability to judge distances and spatial relationships).
   - Ability to adjust focus (ability to adjust the eye to bring an object into sharp focus).

I, ______________________________, (print name), acknowledge receiving a copy of this job description. I also understand that, as an employee, I am expected to perform my assigned duties, to read and abide by all Yurok policies and procedures—personnel, vehicle usage, procurement, etc. I understand that any violations of all established policies and procedures may lead to disciplinary measures, up to and including termination.

______________________________  ______________________  ______________
Employee Signature              Date                      Employee #

______________________________  ______________________
Supervisor Signature             Date