

# Yurok Tribe

# **Job Description**

JOB TITLE:	Geospatial Analyst/Surveyor III			
JOB GRADE:	12/13	REPORTS TO:	Survey Manager/Senior Engineer	
STATUS:	Exempt	LOCATION:	Arcata	
DEPARTMENT:	Fisheries	DIVISION:	Natural Resources	
ALL HIRING IS SUBJECT TO THE YUROK TRIBE'S HIRING PREFERENCE				
SALARY RANGE:	\$79,913-\$104,270/\$94,099-\$122,761			

# **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 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, aircraft, 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.
- 13. Statistical analysis, quality assurance, accuracy assessment and reporting.
- 14. Performs other related duties as assigned.

# **SUPERVISORY RESPONSIBILITIES:**

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

#### **MINIMUM QUALIFICATIONS:**

- 1. National Society of Professional Surveyors (NSPS) Certified Hydrographer (CH).
- 2. Registered Professional Land Surveyor (PLS) with the ability to obtain and maintain a California license.
- 3. Detailed technical understanding of sonar (multibeam and singlebeam), LiDAR (topographic and bathymetric), and photogrammetric remote sensing systems.
- 4. Applied experience with sonar (multibeam and singlebeam), LiDAR (topographic and bathymetric), and photogrammetric technologies and data quality considerations.
- 5. Detailed knowledge and understanding of horizontal and vertical coordinate reference systems and datum transformations.
- 6. 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.
- 7. Experience in the development and implementation of algorithms (Scripts/Models/Macros) as it pertains to automating processes and increasing efficiencies.
- 8. Expertise in LiDAR classification, data aggregation, statistical analysis, quality assurance, assessment, and reporting.
- 9. An ability to operate boats and airborne based mapping equipment, occasionally for consecutive days in remote and strenuous locations.
- 10. High attention to detail and the ability to consistently produce high quality data products with minimal supervision.
- 11. Ability to obtain and maintain a Remote Pilot Certificate (Part 107) license.
- 12. Able to work and think independently.
- 13. Able to problem solve and make sound independent decisions.
- 14. Possess a strong work ethic, energetic, and dedicated.
- 15. Have excellent verbal and written communication skills.
- 16. Recognition that in order to serve Yurok People one must know as much as possible about Yurok history, culture and values.
- 17. Valid State issued driver's license and/or the ability to obtain a California driver's license. Must be insurable on the Tribe's insurance policy.

#### **EDUCATION/EXPERIENCE**:

- 1. Grade 12: Bachelor's degree in surveying, geomatics, or related engineering program and 5 (5) plus years applicable experience at a responsible charge level in topographic and bathymetric projects.
- 2. Grade 13: Relevant Masters with 4 years' experience or bachelor's with 6 years' experience or other specified experience related to surveying, engineering, and geomatics.
- 3. Ability to provide portfolio of past projects that demonstrates responsibilities, technical and reporting experience.
- 4. Candidates with equivalent combinations of education, training and experience will be considered.

#### **CONDITIONS OF EMPLOYMENT:**

- 1. All applicants are subject to the Tribe's Drug and Alcohol Policy including pre-employment screening.
- 2. Valid state issued driver's license and/or the ability to obtain a California or Oregon driver's license. Must be insurable on the Tribe's insurance policy.
- 3. Must pass a background investigation and fingerprint clearance.

#### **LANGUAGE SKILLS:**

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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. Knowledge of Yurok language is preferred but not required.

# **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.

# **PHYSICAL DEMANDS:**

While performing the duties of this job, the employee is frequently required to walk, stand, use hands and fingers, handle, or feel. Employee will have prolonged periods sitting at a desk and working on a computer. The employee must occasionally lift and/or move up to 50 pounds.

# **VISION REQUIREMENTS:**

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

I,	al laws, policies and procedures, vehicle ok Tribe. I understand that any violations ures, up to and including termination. I u employment relationships are both pers be has no specific duration, and either th	tted to perform my assigned usage, procurement, and any of all established policies and understand that the Yurok sonal and voluntary. The employee or the Yurok
Employee Signature	Date	Employee #
Supervisor Signature	Date	

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