

**YUROK TRIBE-JOB DESCRIPTION**  
Geospatial Analyst/Surveyor

Job Title:	<b>Geospatial Analyst/Surveyor II</b>				
Job Grade:	<b>9/11</b>	FLSA Status:	<b>Non-Exempt</b>	Location:	<b>Arcata, CA</b>
Department:	<b>Fisheries-Design and Technical Services Program</b>		Division:	<b>Natural Resources</b>	
Reports To:	<b>Survey Manager/Senior Engineer</b>				
<b>ALL HIRING IS SUBJECT TO THE YUROK TRIBE'S HIRING PREFERENCE</b>					
Salary Range:	<b>\$27.23-\$35.53/\$29.75-\$38.81</b>				

**POSITION SUMMARY:**

Incumbent is under the direct supervision of the Geospatial Analyst/Surveyor III or Survey Manager and works to support the technical acquisition specialists. This position requires knowledge of topography and bathymetry to plan, execute and document projects to applicable standards and specifications. The analyst/surveyor assists 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/surveyor 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. Depending on incumbent's experience and skills the position may require field work ranging from 25% to 75% of time. Field surveys will include assisting with acquisition using various remote sensing technologies from boats, aircrafts, and UAV's. Office duties will be carried out at the Arcata Field Office and occasionally onsite 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. Assist with 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. May be assigned other duties as required to meet the needs of the organization.

**SUPERVISORY RESPONSIBILITIES:**

This is not a supervisory position, but incumbent may be required to act in charge when senior onsite.

**MINIMUM QUALIFICATIONS:**

1. Bachelor's degree in surveying, geomatics, or related engineering program.

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2. EIT or LSIT with the ability to obtain Registered Professional Land Surveyor (PLS) License in the State of California.
3. Strong 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. Technical 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. Experience in LiDAR classification, data aggregation, statistical analysis, quality assurance, assessment, and reporting.
9. An ability to operate boat 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, be energetic, and dedicated.
15. Have excellent verbal and written communication skills

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

Bachelor's degree in surveying, geomatics, or related engineering program and five (5) plus years applicable experience in topographic and bathymetric projects. Alternatively, ten (10) years demonstrated specific experience.

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 Free Work Place 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.

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- 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