

**YAKAMA NATION HUMAN RESOURCES DEPARTMENT
JOB ANNOUNCEMENT**



Announcement # 2018-020 **Issue Date:** 01-23-18 **Closing Date:** 02-12-18

Biologist IV
Fisheries YKFP
Department of Natural Resources
Hourly Wage: \$30.28/Regular/Full-Time
Location: Nelson Springs

The Fisheries Biologist IV will use professional knowledge and competence in biology, statistics, and mathematics to perform tasks in the following areas:

Evaluation of Diversion Dams and Mark Detection Sites Compile juvenile migration and adult return and escapement data generated through visual surveys and counts, radiotelemetry, acoustic detection and PIT tag detection. Monitor Yakima Basin salmonids including: Spring, Summer, and Fall Chinook, Coho, Sockeye, and Summer Steelhead passing Prosser Dam and other Yakima Basin diversion dams using visual counts and mark detections both instream and within passage facilities at diversion dams. Estimate mark detection efficiencies, juvenile entrainment rates and juvenile passage and survival rates within selected facilities using locally-generated data and, as needed, upstream and downstream detection sites. Advise YN Fisheries Managers on mark detection strategies and mark release numbers and timing for estimating juvenile passage and bypass survival rates at Yakima Basin diversion dams. Estimate detection efficiency of instream antenna arrays and assist YN Fisheries Managers with design and placement of arrays to maximize efficiency. Work with YN Fisheries Managers to identify potential passage problem areas and to develop recommendations for improving fish passage.

Survival Rates, Travel Times and Return Rates of Juvenile Release Groups Estimate juvenile survival and travel time from marking or release to downstream passage at instream antenna arrays, Prosser Dam and McNary Dam for differentially-marked hatchery and wild Yakima Basin salmonids including: Spring, Summer, and Fall Chinook, Coho, Sockeye, and Summer Steelhead. Estimate return rates of juvenile release groups and juvenile marking, release or instream detection to adult return at Columbia River dams and Yakima Basin dams and other mark detection sites. Estimate straying rates of marked adults within and outside the Yakima Basin. Statistically compare variables, including survival and travel time, among stocks, treatment types, broodstock crosses and/or release locations. Advise YN Fisheries Managers on the numbers of marked fish to release and on replication strategies to develop reliable estimates and comparisons of juvenile survival rates from release to instream antenna arrays, Prosser Dam and McNary Dam, and return rates of adults to various locations in the Yakima Basin.

Monitoring and Evaluation of Populations Status and Trends Monitor variability in fish population abundance and productivity indices by brood year and outmigration year in relation to local and Columbia Basin-wide limiting factors. Assist YN Fisheries Managers with designing studies to quantify predator impacts on rearing and outmigrating juvenile salmon and steelhead in the Yakima Basin, and analyzing study results. Assist YN Fisheries Managers with strategies to limit predation impacts on juvenile salmon and steelhead in the Yakima Basin.

Knowledge, Skills and Abilities:

- Training and relevant experience in statistical evaluation and analysis in fisheries or another biological field transferable to fisheries disciplines.
- Familiarity with querying large databases and manipulating local datasets using database, statistical, and programming software.
- Ability to distill and communicate complex technical information to policy and lay audiences.
- Ability to collaborate and build relationships with a variety of individuals and organizations.
- Understanding of the larger ecological and management issues addressed by one's own specialized work.
- Ability to work outdoors on occasion, possibly under arduous conditions.

General Recruiting Indicators:

- Master of Science Degree with concentration in animal population biology and statistics AND at least 3 years of relevant, professional work experience.
- Fisheries education and work experience is desirable but not required.

Special Requirements:

- Required to pass a pre-employment drug and alcohol test.
- Must Possess or have the ability to obtain a Washington State Driver's License and be able to obtain a Yakama Nation driving permit.
- Yakama Enrolled Preference, but all qualified applicants are encouraged to apply.