**Cleary, Peter – Nez Perce Tribe**

**Presentation Title: Dispersion of Radio Tagged Steelhead Spawners in the South Fork Clearwater River**

Abstract for the 2018 Pacific Coast Steelhead Management Meeting

South Fork Clearwater River steelhead adults were radio tagged in the fall and spring prior to spawning in the spring of 2013 to 2017 to evaluate and compare the spawning distribution of natural and two types of hatchery steelhead; a conventional program and a supplemental program. Returning hatchery and natural steelhead adults selected for radio tagging were either caught in the South Fork Clearwater River by sports anglers during the spring or at the Lower Granite Dam Adult Trap during the previous fall. Adults captured by sports anglers in the spring were identified by a combination of marks and tags. Adults captured at the Lower Granite Dam trap were identified by their juvenile PIT tag. Natural and hatchery steelhead spawn locations ranged from river kilometer 3 and 2, respectively, to river kilometer 100 for both groups with few fish spawning upstream of river kilometer 71 and showed no discernable differences between areas selected for spawning within the South Fork Clearwater River. Densities of hatchery spawners were visibly highest around juvenile release locations. Telemetry data of adult fish movement around river kilometer 71 suggests an adult migration passage barrier forms when discharge reaches approximately 1,000 cfs. The presence of a migration barrier with only one hatchery juvenile release site upstream of the migration barrier may explain why few adult steelhead spawners are utilizing the furthest upstream reaches of suitable steelhead spawning and rearing habitat in the South Fork Clearwater River.