**Abstract for PSMFC Steelhead Meeting. Newport, Oregon March 15, 2023**

Title: Development of e-Creel for Steelhead: Monitoring Harvest and Release of Steelhead in Oregon’s Recreational Fisheries

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In 2019, the Oregon Department of Fish and Wildlife (ODFW) began implementing an Electronic Licensing System (ELS) to effectively administer licenses and harvest tags for anglers, enhance regulatory enforcement, and reduce operating cost. Subsequently, Pacific Salmon Treaty (PST) researchers and managers in Oregon are now able to attain expeditious, cost effective, and confident estimates of Chinook Salmon harvest through the development of e-Creel. PST management requires precise estimates of harvest which previously could only be derived through traditional creel surveys. Traditional creels are known to be difficult to implement, often requiring complicated statistical methods. Anglers can elect to purchase and report harvest using an electronic (e-tag) or paper tag. Unlike fish reported on paper tags, e-tagged fish are automatically uploaded and saved within agency databases. Paper tag return is voluntary and e-tag return is compulsory; the compulsory reporting that occurs in the ELS system has led to a paradigm shift on how recreational fish harvest can be estimated. By applying capture-recapture techniques to ELS data using e-Creel, ODFW has been able to increase the precision of harvest estimates at a reduced cost relative to traditional creel techniques. Moreover, continued development of the e-Creel has expanded its utility to precisely derive harvest estimates on a statewide basis for all recreational fisheries requiring harvest validation. Future applications may allow for harvest estimation from neighboring basins where in-person creels were not conducted. This presentation will provide an overview on the development of Steelhead harvest and release estimation using the agency’s new e-Creel methodology.