

**STATE OF WASHINGTON**

## Washington Department of Fish and Wildlife (WDFW)

## SOLE SOURCE POSTING

**1) A description of the purpose and scope of the contract and background:** The Washington Department of Fish and Wildlife (WDFW) contemplates awarding a sole source contract to Mount Hood Environment (www.mthoodenvironmental.com) to continue work they have been performing for WDFW.

In 2019, WDFW proposed adding the development of an integrated population model (IPM) for Columbia River (CR) chum salmon to our existing Bonneville Power Administration (BPA) project (contract 2008-710-00). At that point, we had been implementing a three-pronged CR chum recovery strategy centered around hatchery supplementation, habitat restoration, and monitoring and evaluation (M&E) for nearly two decades. While monitoring data had been used to evaluate the status of key populations and the performance of some management actions, these evaluations were always completed using an ad hoc, piecemeal approach that had numerous limitations. By building an IPM, we could leverage all monitoring data within a unified statistical framework that would not only improve existing estimates but would also create an analytical platform that could ultimately be the cornerstone for population assessment, adaptative management, and restoration planning for CR chum.

Since FFY2019-20, we have been iteratively building a customized IPM for CR chum salmon. To increase capacity and accelerate progress, we have established an ongoing partnership with Eric Buhle, a leading expert on IPMs, through a sub-contract with his employer. By partnering with Eric, we were able to easily and efficiently build upon an existing IPM framework and R package salmonIPM developed by NOAA and Biomark (Buhle et al. 2018). In the first year, we compiled nearly two decades of monitoring data for CR chum salmon, expanded the standard models included in salmonIPM to develop a customized model for these populations and data sets, and performed initial model fitting. Since then, our strategy has been to sequentially add important elements that make the model a more realistic description of the CR chum metapopulation and a better fit to the available monitoring data. In year two (FFY2020-21), the model was updated to better reflect CR chum characteristics (e.g., sex structure, freshwater density dependence) and operational activities (e.g., translocation of adults into spawning channels, reduced fecundity of partially spawned females). In year three (FFY2021-22), we began refining elements of the model to more accurately reflect hatchery chum populations (e.g., explicitly model hatchery smolt-to-adult survival along with straying and spatial connectively) and updated the model output to include most management reference points required for annual reporting. In year four (FFY2022-23), we focused on adding components to the model to facilitate the evaluation of hatchery supplementation, which included continuing to model hatchery smolt-to-adult survival and straying and completing an initial scenario analysis of hatchery supplementation.

**2) The criteria or rationale justifying the sole source contract:**  The Mount Hood Environmental Project Manager (statistician) has helped to develop and build the required data sets and has been working on this project for many years. The work he has completed to date, would take years to replicate and is being used by other organizations including the Bonneville Power Administration (BPA) which had previously funded the project.

**3) The name of the prospective contractor:** Mount Hood Environmental (Boring, OR)

**4) The projected contract value:** The maximum not to exceed for this project is $142,000 and will be billed at an hourly rate of $130/hour for the statistician’s time.

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| **5) Options for extensions:** extensions will not be required. |

**6) A description of the process for providing vendor inquiries or responses to the posting agency, including timelines and requirements and a request for capability statements if a vendor believes they can provide the goods or services being procured under the sole source contract:** Offerors contemplating the above requirements are required to submit a capability statement detailing their ability to meet the state’s requirements by 5:00 p.m. PST on March 15, 2024. To submit capability statements or for questions, please contact: Theresa Walker, Deputy Contracts Officer, at [Theresa.Walker@dfw.wa.gov](mailto:Theresa.Walker@dfw.wa.gov).