# Fish Passage Plan (FPP) Change Form

**Change Form # & Title**: 23AppL002 – Pinniped Monitoring

**Date Submitted**: 13-MAR-2023

**Project**: Appendix L, Bonneville Dam

**Requester Name, Agency**: Bjorn van der Leeuw, Corps NWP

**Final Action:** **APPROVED – May 11, 2023**

**FPP Section**: Appendix L. BON section 3.5 (Pinnipeds)

**Justification for Change**: The Corps’ pinniped predation monitoring plans were not previously documented in the FPP, Appendix L. In the past, monitoring plans have been documented via email and in FPOM meetings. Documenting in Appendix L of the FPP will help the Corps document compliance with annual reporting requirements under NMFS’ 2020 CRS Biological Opinion.

**Proposed Changes**:

**3.5. Pinniped Predation Monitoring.** The Corps will annually implement pinniped predation monitoring at BON:

1. Pinniped presence and abundance will be surveyed Monday – Friday year-round (except federal holidays). As historically done, the tailrace area of the dam will be surveyed for pinniped presence by trained biologists using field glasses. These daily counts will be partitioned by species of pinniped and will attempt to evaluate which individuals are present using unique identifiers (i.e., human-applied marks and brands). This information will be reported at each FPOM meeting and will also be described in an annual report.
2. Pinniped predation on salmonids and other fish will be surveyed Monday – Friday (except federal holidays) when pinniped abundance is greater than or equal to 20 animals at Bonneville Dam. Sampling intensity may increase above the baseline criteria of 20 animals if resources are available. Predation estimates will be produced in a manner consistent with historic methods. This involves a stratified systematic sampling of daylight hours in the dam’s tailrace by trained biologists using field glasses to observe predation events. The result of this monitoring is a bounded-mean estimate of adult salmonid consumption by each pinniped species. If sufficient data is present, the Corps will also produce estimates of White Sturgeon and Pacific Lamprey consumption. Preliminary information will be reported at each FPOM meeting and finalized data will be described in an annual report.

3.6. Pinniped Predation Management. The Corps will annually implement pinniped predation management actions at BON:

* + - * 1. California Sea Lions and Steller Sea Lions shall be hazed at Bonneville Dam daily across daylight hours from March 31 through May 31 and from August 15 through October 31. Hours should vary so that pinnipeds do not acclimate to long periods with no hazing, unless otherwise coordinated with the POC.
        2. Pinniped hazing techniques are defined in the approved *Operating Plan* and in accordance with the *Marine Mammal Protection Act of 1972, Section 109 h.1.c*.
        3. Pinnipeds hazing shall occur in the tailrace of the dam and spillway, Tanner Creek, and areas where pinnipeds haul out (unless otherwise coordinated for trapping efforts), ranging to approximately 1,500 feet downstream of the dam and outfall site.
        4. Special activities will be coordinated each year as necessary with Federal, State and Tribal boat hazing, trap/take efforts and/or special evaluations or tests.
        5. Sea Lion Exclusion Devices (SLEDs) will be installed at all adult fishway entrances and floating orifice gates (FOGs). All SLEDs may be left in year-round.
        6. The downstream navigation lock gates will be kept closed until necessary to open for a vessel locking through.

**Comments**:

**Record of Final Action**: Approved at FPOM on May 11, 2023