A questionnaire was completed in early 2018 by 19 of the 20 wild sheep program managers in the western U.S. states and Canadian provinces on their ram hunting permit/tag process, demographic survey efforts, season structure and limited hunt results. A similar review of west-wide ram harvest strategies was conducted 10 years ago. The goal of the questionnaire was to: • review the demographic information collected and guidelines and criteria used in setting ram hunting permit numbers; • compare season structure and harvest metrics; and • challenge jurisdictions to use the best available science and consider more ram hunting opportunities without sacrificing ram horn quality.

Table 1 summarizes agency's survey methods, objectives, and frequency; ram classification; and population estimating methods. Figure 1 is a timeline that displays the variability in timing of surveys conducted by each jurisdiction by species and subspecies. To determine ram hunting permit numbers, most agencies use a guideline of 1) percent of the current estimated population size; 2) total rams; 3) mature rams in population or survey; or 4) previous year's ram harvest metric (Table 2). Two agencies have no standard guideline. The ranges of long-term average ram harvest age by jurisdiction and species/subspecies were: 7.8 – 9.3 for Dall/Stone; 6.5 – 7.0 for California; 6.4 – 10 for Rocky Mountain; and 6.4 – 9.0 for Deserts (Figure 2). Figure 3 timeline shows the similarities and differences of ram hunting seasons across the westwide by species/subspecies. Figure 4 map compares the magnitude of ram harvest by jurisdiction west wide. Most jurisdictions have a similar hierarchical decision/approval ram permit process of: • field/regional review of wild sheep data and information and suggest/submit recommendations; program lead and Bureau/Division heads provide oversight and support; wide array of stakeholder involvement; and final Board/Commission review and approval. One state has a single committee that sets permit numbers with no public process. One jurisdiction is moving to a formal “Structured Decision Making” (SDM) process to better engage stakeholders, provide transparency, account for uncertainty and values/opinions, while incorporating science and following management objectives. Finally, Table 3 applies each of the jurisdictions ram permit # guideline to Nevada’s desert bighorn herds to compare the resulting ram permit numbers compared to Nevada’s 2017 approved desert bighorn ram permit #s.