

Identifying Pathways to Decline in the Junction-Churn Creek California Bighorn Sheep Population, British Columbia

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ABSTRACT California bighorn sheep (*Ovis canadensis californiana*) populations found along the Fraser River in south-central British Columbia provided source animals for transplants to 6 states between 1954 and 1990. These sheep populations suffered significant declines during the late 1990s and some have failed to recover. As a result, a recovery and management plan is being developed for the Churn Creek and Junction herds, where populations remain more than 80% below 1995 levels. Although the Junction population appears stable, migratory bands using the Churn Creek drainage appear close to extirpation. Preliminary work has involved developing a working hypothesis to identify potential pathways to decline and feasible management actions to address possible causes. Analyses of existing data suggest that predation is the most likely proximate cause preventing population recovery. This could be due to local habitat changes (e.g., forest ingrowth) and regional changes in the broader predator-prey system.

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