

**Meeting Date:** November 16, 2023

**Agenda Item No.** 13

**Agenda Item:** Measuring Habitat Carrying Capacity – Lolo Elk

**Bureau Chief Approval:** SR

**Prepared by:** Deborah Monzingo, Regional Wildlife Biologist

**Background:**

This presentation details the Clearwater Region’s strategy of utilizing Clearwater Basin Collaborative (CBC) elk nutrition data to develop Lolo Zone elk population objectives for the 2024–2029 Elk Management Plan.

From the 1970s to the mid-1990s, the Clearwater Region’s Lolo Zone elk population was robust, with population estimates exceeding 16,000 animals. Since then, the population declined significantly, with the most recent estimate at less than 2,000 elk. The population decline is due to several factors, including large changes to key elk habitat. Currently, the Nez Perce-Clearwater National Forest (covering 96% of the Lolo Zone) is dominated (~80%) by mid- to late-aged forests that provide little forage for elk. Due to the short timeframe of the new draft elk management plan (6 years) relative to the timeframe likely needed for landscape-scale forest restoration work, the Clearwater Region chose to investigate a new method for determining a realistic elk population objective for the lifespan of the new elk plan. This method uses information on elk forage availability and quality to calculate an estimate of the number of elk the habitat in the Lolo Zone could likely support over the next several years (aka - habitat carrying capacity).

The Clearwater Region had the unique opportunity to use this method because of the detailed elk nutrition information collected by the CBC. The CBC has completed nearly 10 years of research (still ongoing), worth hundreds of thousands of dollars, to provide information on the Clearwater Region’s elk herds and habitat. Staff were able to use the CBC nutrition information, along with some assumptions, to estimate the elk habitat carrying capacity for the Lolo Zone (Table 1).

Staff will present an overview of how the estimates were calculated and how they relate to proposed Lolo Zone objectives in the draft elk management plan.

Table 1. Elk Population Estimates in the Lolo Elk Management Zone.

<b>Estimate Type</b>	<b>Cows</b>	<b>Calves</b>	<b>Bulls</b>	<b>Total</b>
2017 Aerial Survey	1,137	331	425	1,945
2016 Carrying Capacity-Based Estimates	1,827	532	683	3,125
<b>Draft Elk Plan Objective Range*</b>	<b>1,500-2,200</b>		<b>550-800</b>	
<i>*To provide an objective range for the draft elk plan, a ~20% buffer was added above and below the carrying capacity-based estimates.</i>				

**Statutory Authority and/or Policy Issues:**

The Idaho Fish and Game Commission administers state wildlife policy through supervision and management of the Department (Idaho Code 36-104). Species management plans are the guiding documents for management actions and are a direct reflection of the Department Strategic Plan. The *Idaho Elk Management Plan 2024-2029* will function as the action plan for elk management in Idaho.

**Public Involvement Process:**

This agenda item is for information only.

**Justification:**

The information presented will be incorporated into the draft *Idaho Elk Management Plan 2024-2029*. This change would provide an elk population objective that is reasonable for the management plan timeframe.

**Staff Recommendation:**

This agenda item is for Commission information. No action is required.