



#### IV. Description of Reasonable Alternatives to Regulatory Action

##### (a) Alternatives to Regulation Change

No alternatives were identified by or brought to the attention of Commission staff that would have the same desired regulatory effect.

##### (b) No Change Alternative

The no change alternative was considered and rejected because it would not be consistent with maintaining bighorn sheep populations within desired population objectives. Fish and Game Code subdivision 4902(b) and management unit plans specify desired harvest levels. Retaining the current tag quota for each zone may not be responsive to environmental and biological changes in the status of various herds. The no-change alternative would not allow for adjustment of tag quotas in response to changing environmental and biological conditions.

##### (c) Consideration of Alternatives

In view of information currently possessed, no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed, would be as effective and less burdensome to affected private persons than the adopted regulation, or would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

##### (d) Description of Reasonable Alternatives that Would Lessen Adverse Impact on Small Business

None identified.

#### V. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following determinations relative to the required statutory categories have been made:

##### (a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States

The Commission estimates that five hunting guides that contract with bighorn sheep tag holders to provide guide services will lose the opportunity to compete for contracts for trips with four hunters with drawn tags and one hunter with a fundraising tag due to the proposed reduction in tags. However, in sum, the proposed regulation is not anticipated to have a significant statewide adverse economic impact directly affecting business broadly, including the ability of California businesses to compete with businesses in other states. This regulatory action will not impose cost impacts that a representative individual hunter would necessarily incur in reasonable compliance with the proposed regulation.

##### (b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment

The Commission does not anticipate the creation of jobs and anticipates the elimination of up to 1 full-time-equivalent (FTE) job comprised of 15 temporary (3.5 week) jobs for hunting guide aids (sub-guides) within the state. No significant impacts to the creation of new business, the elimination of existing businesses, or the expansion of businesses in California are anticipated. The Commission does not anticipate direct benefits to the general health and welfare of California residents or to worker safety but anticipates benefits to the environment.

(c) Cost Impacts on a Representative Private Person or Business

The Commission estimates that five bighorn sheep guides will lose the opportunity to compete for contracts for hunting trips with ~~five~~ **four** public tag hunters ~~and one fundraising tag hunter~~ due to the proposed reduction in tags for the affected hunt zone. The hunt guides receive an estimated average of \$9,000 per public drawn hunt ~~and an average of \$14,500 for a fundraising tag hunt~~ and with the maximum loss of six hunts the combined loss to all bighorn sheep guides is estimated to be approximately ~~\$59,500~~ **\$36,000** over the hunting season ( $\$9,000 \times 4$ ) public tags + ~~( $\$14,500 \times 1$ ) fundraising tag~~ = ~~\$59,500~~ **\$36,000** or approximately ~~\$11,900~~ **\$7,200** per guide in income opportunity losses.

(d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State

The Department anticipates an estimated maximum decline of ~~-\$74,034~~ **-\$2,001** in tag sales revenue with the implementation of the proposed regulation.

(e) Nondiscretionary Costs/Savings to Local Agencies

None.

(f) Programs Mandated on Local Agencies or School Districts

None.

(g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code

None.

(h) Effect on Housing Costs

None.

## Updated Informative Digest/Policy Statement Overview

Current regulations in Section 362 provide definitions, hunting zone descriptions, season opening and closing dates, tag quotas (total number of hunting tags to be made available), and bag and possession limits for bighorn sheep hunting. Individuals are awarded a bighorn sheep hunting tag through the Department's Big Game Drawing. A limited number of fundraising tags are also available for purchase, usually by auction, via non-governmental organizations that assist the Department with fundraising.

Harvest of a bighorn sheep is authorized for an individual with a tag for a respective hunt zone and season. Tag quotas are established based on a variety of factors including population density and abundance, age and sex composition, and distribution. The Department has identified the following areas in which bighorn sheep hunting opportunities need to be reduced.

The proposed changes to Section 362 includes amending subsection 362(d) to modify the hunt tag quota for the general lottery in the Marble and Clipper Mountains Hunt Zone 1 and a pertinent fundraising tag. Currently, the Marble and Clipper Mountains public tag quota is 5 tags, and 1 for the Marble, Clipper, and South Bristol Mountains Fundraising tag. For 2023, the proposed tag allocation for the Marble and Clipper Mountains is 1 tag for the public tag quota, and 1 tag for the Marble, Clipper, and South Bristol Mountains Fundraising Tag.

The Marble and Clipper Mountains populations have been subject to extreme drought, low recruitment, and respiratory disease in recent years, and the most recent population estimates suggest a decline. Specifically, the Department's 2022 population estimate from the summer of 2022 was only 25 to 83 adult male sheep such that the mature (2-yrs+) population available for hunting could be less than 25 rams. Therefore, the current tag quota of 5 tags may exceed the 15% threshold. Furthermore, annual surveys during 2015–2022 indicated between 0 and 0.18 lambs per ewe survived from the previous year to be counted as yearlings (i.e., recruitment). The minimum recruitment rate for a sustainable population is on the order of 0.20. Low recruitment rates are attributed to impacts from severe drought, and to impacts of a respiratory disease-causing pathogen (*Mycoplasma ovipneumoniae*) first detected in the Marble Mountains population in 2013. For these reasons, a tag quota range is proposed that will allow consistency with management unit plan recommendations and prevent a possible violation of Fish and Game Code. Due to concerns regarding the low population and reproduction estimates, the Department is taking a precautionary approach by proposing the option of reducing the total tag quota by up to six tags for next year's season. The Department will consider minimum population viability recommendations in unit planning documents for the Marble and Clipper Mountains units, and the desert bighorn sheep population statewide when recommending harvest tag quotas.

Based on the Department's best estimates of recruitment and survival, the Marble Mountains population of bighorn sheep appears to be declining. A combination of drought and respiratory disease and resulting low recruitment over many years are possible reasons for the decline. With climate change impacting this ecoregion, environmental stressors on this population may worsen. However, precipitation has been promising this winter, which may result in an uptick in recruitment.

The Department was asked to conduct a population viability analysis (PVA) which confirmed the predicted decline. It also confirmed the effects of hunting a small number of mature rams is negligible to the population. The same analysis indicates that there are not many mature rams available for harvest.

The proposal has been amended to maintain two tags in the hunt zone, split between the general lottery and fundraising allocations. This proposal is supported by the analysis and is a conservative approach to managing and maintaining hunting opportunity with consideration to the conservation status of these populations.

Finally, the Department will investigate improving population estimation methods where possible, though successful surveys have been subject to variable weather events. To further safeguard these populations, we will continue to work towards maintaining connectivity across populations and maintaining and enhancing surface water availability in the region.

#### Benefit of the Regulations:

The proposed regulatory action is designed to help achieve management objectives related to current environmental, biological, and social conditions, as outlined in the Marble and Clipper Mountains Management Plans, and to comply with the 15 percent threshold identified in Fish and Game Code 4902(b)(2).

#### Consistency and Compatibility with Existing Regulations:

Article IV, Section 20 of the State Constitution specifies that the Legislature may delegate to Commission such powers relating to the protection and propagation of fish and game as the Legislature sees fit. Commission staff has searched the California Code of Regulations and has found no other state regulations that address the tag quotas (total number of hunting tags to be made available), and bag and possession limits for bighorn sheep hunting. The Commission has reviewed its own regulations and finds that the proposed regulations are consistent with other big game mammal regulations in Title 14, CCR, and therefore finds that the proposed regulations are neither inconsistent nor incompatible with existing state regulations.

#### **UPDATE**

**On April 19, 2023, the Commission adopted the proposed regulations as set forth in the Pre-Adoption Statement of Reasons (PSOR) dated March 19, 2023. The adopted regulations reduce the general lottery harvest tag quota of Nelson bighorn sheep in the Marble and Clipper Mountains from five to one tag and maintain the fundraising tag quota at one for the Marble, Clipper, and South Bristol Mountains.**

**There have been no changes in applicable laws or to the effect of the proposed regulations from the laws and effects described in the Notice of Proposed Action.**