



STATE OF NEVADA

DEPARTMENT OF WILDLIFE

Game Division

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MEMORANDUM

March 1, 2016

To: Nevada Board of Wildlife Commissioners, County Advisory Boards to Manage Wildlife, and Interested Publics

From: Brian Wakeling, Administrator, Game Division *Bpw*

Title: **Bighorn Sheep Disease Surveillance and Herd Performance from 2012 to 2015 – Informational**

Description: The Department will provide a presentation depicting Nevada bighorn sheep herd responses (lamb recruitment as primary metric) over time in relation to disease exposure, environmental factors, and other variables. This presentation will cover information developed from data collected over the last three years.

Presenter: Wildlife Staff Specialist Mike Cox

Agenda No: 10 A

Summary:

The Department will provide an overview of the current state of knowledge regarding the respiratory disease in bighorn sheep, herd health descriptions and exposure within Nevada, and management alternatives currently available. Respiratory disease within bighorn sheep can be confusing for professional wildlife managers and health specialists to understand, and disease progression among herds is not consistent. Disease exposure within a herd may manifest itself in an all age die-off throughout the population with multiple years of reduced recruitment or as a very minor disease event with little to no population level affect. The Department has identified at least four typical herd responses, which may be influenced by a variety factors including disease strain, herd nutritional plane, bighorn sheep density, and environmental factors. Bighorn sheep that survive and outbreak of respiratory disease may become carriers and transmit the disease to lambs or other bighorn sheep herds or sub-herds that may not have yet been exposed. Nevada is participating with the WAFWA Wild Sheep Working Group on adaptive management strategies to ensure our responses and actions are consistent with recent advances in wildlife health science.