C. D. MICHEL

SPECIAL COUNSEL
JOSHUA R. DALE
W. LEE SMITH

ASSOCIATES
SEAN A. BRADY
SCOTT M. FRANKLIN
HILLARY J. GREEN
THOMAS E. MACIEJEWSKI
CLINT B. MONFORT
JOSEPH A. SILVOSO, III
TAMARA M. RIDER
LOS ANGELES, CA

C.D. Michel:
(562) 216-4444
CMichel@michellawyers.com

MICHEL & ASSOCIATES, P.C.
Attorneys at Law

OF COUNSEL
DON B. KATES
SAN FRANCISCO, CA

RUTH P. HARING
LOS ANGELES, CA

GLENN S. MCROBERTS
SAN DIEGO, CA

AFFILIATE COUNSEL
JOHN F. MACHTINGER
JEFFREY M. COHON
LOS ANGELES, CA

DAVID T. HARDY
TUCSON, AZ

September 19, 2011

VIA ELECTRONIC & U.S. MAIL
Rene.henson@dfw.wa.gov
wildthing@dfw.wa.gov

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
Attn: Wildlife Program
600 Capitol Way North
Olympia, WA 98501-1091

Re: Washington Department of Fish and Wildlife's 2012-2014 Hunting Season and the 2011 Ban of Traditional Lead-Based Ammunition

To Whom it May Concern:

We write on behalf of our client the National Rifle Association ("NRA"), as well as numerous individuals, hunters, recreational shooters, firearm ammunition manufacturers and dealers within the state of Washington, regarding Washington Department of Fish and Wildlife ("WDFW")'s season setting regulation process for the 2012-2014 hunting seasons and the new 2011 lead ammunition ban for all upland game, dove and band-tailed pigeon hunting on all pheasant release sites statewide.

WDFW's recent regulation that further expands its ban of traditional lead-based ammunition to include all upland game, dove and band-tailed pigeon hunting on all pheasant release sites statewide, is not warranted or supported by science. Our client asks that the WDFW seek a repeal of the lead ammunition ban, and suggests that WDFW more carefully assess the necessity of implementing additional lead ammunition bans. Simply put, there is insufficient credible scientific support for this proposal.

Strict adherence to the environmental NGO's campaign of "Getting the Lead Out" directly contradicts an overwhelming majority of western United States fish & game departments, which endorse a more measured approach through the implementation of voluntary programs that provide hunters the option of using alternative ammunition or to continue using traditional lead-based ammunition. WDFW has instead continued to expand its regulations in pursuit of an unsupported and unjustifiable lead ammunition ban statewide. The new 2011 lead ban regulation is yet another step in that direction.

WDFW's expansion of its lead ammunition ban regulations is not supported by science, and WDFW's actions fail to responsibly address the concerns expressed by its constituents (i.e. hunters and recreational shooters). These lead ammunition bans burden hunters and recreational shooters by requiring

them to purchase alternative ammunition, which is generally more expensive than traditional lead-based ammunition, can be difficult to obtain and can damage firearms. Additionally, lead ammunition bans have a detrimental effect on hunter recruitment and retention efforts. Declining revenues from decreasing numbers of hunters in Washington will threaten the state's hunting heritage and will impact wildlife and habitat conservation efforts by WDFW.

WDFW's desire to expand regulations to ban lead ammunition directly contradicts the cohesive strategy followed by other western states, as members of the Western Association of Fish and Wildlife Agencies ("WAFWA"). WDFW's mission to "Get the Lead Out" makes it one of the most vocal states in WAFWA by zealously pursing lead ammunition bans. WDFW efforts follow other states' recent failures in attempting to implement or extend regulations to ban lead ammunition (e.g. Iowa's 2011 lead ban, later delayed by the Legislature), rather than pursuing voluntary programs that provide hunters the option of using lead or alternative ammunition (e.g. Arizona and Utah). Further, WDFW's actions are incongruent with fundamental principles followed by both WAFWA and the national organization, Association of Fish and Wildlife Agencies ("AFWA"), because the science relied on by WDFW to justify the 2011 lead ban does not evidence a population level effect on any wildlife species of concern in Washington.

WDFW's reliance on what it believes to be a adequate scientific literature to support its expansion of lead ammunition bans in the state is unfounded. In fact, WDFW has itself stated in its March 25, 2011, WDFW Fact Sheet that not all of the pheasant release sites present a potential problem, but that all pheasant release sites were converted to alternative ammunition use based on a high potential for ingestion of lead by wildlife. WDFW does not, however, provide supporting documents for this alleged concern. And as discussed below, there is no convincing evidence to support WDFW's continuing expansion of lead ammunition bans within the state.

Ingestion Studies do not Support the Conclusion that Lead Poisoning of Upland Game is Caused by Lead Ammunition

WDFW's own Nontoxic Shot Working Group submitted a report to the WDFW Commission on February 12, 2001 titled, "Report to the Washington Fish and Wildlife Commission: The Use of Nontoxic Shot for Hunting in Washington," ("Report"). In this Report, the Nontoxic Shot Working Group makes several statements, each suggesting that lead shot may not be the source of lead poisoning in certain wildlife and that there are alternative sources of lead that pose a danger to the environment.

The Report states that "the link between the use of lead shot for upland game hunting and secondary lead poisoning has only been demonstrated in a few instances." In one of those instances cited in the Report, the study states that, "Although the finding of a high incidence of elevated lead exposure was surprising, *the source of exposure was uncertain.*" The study explains that subsequent research was conducted suggesting that lead shot used for upland game bird hunting is a likely source of high bone-lead accumulation for American Woodcock. But the study completely fails to explain any exposure pathway for ingesting lead shot, or whether there was lead shot actually observed in the GI tracts of the woodcock.

Studies have shown that only about 3% of upland game birds actually ingest shot while feeding.

In these cases, natural digestion of food buffers the stomach acid and sweeps the lead shot out of the gizzard before significant absorption can occur. In addition, lead shot is not soluble in the intestinal tract, and small amounts of lead shot can pass through the digestive tract before poisoning occurs. We are aware of some studies that report that significant amounts of lead can be absorbed by the stomach under unnatural feeding conditions. But these studies required either forced feeding or constant feeding of large amounts of lead shot on a frequent basis for long periods of time. Other studies have shown that exposure to lead shot under natural feeding conditions simply does not lead to poisoning of upland birds.

Alternative Sources of Lead in the Environment

The Report by the Nontoxic Shot Working Group also mentions a Minnesota and Wisconsin study that showed the incidence of lead poisoning in bald eagles did not decline from 1987 to 1995, even though lead shot was prohibited for waterfowl hunting. This study casts significant doubt on the theory of lead ammunition causing poisoning, considering that the ban should have decreased the bio-availability of lead shot and, in turn, decreased the number of birds allegedly poisoned by lead shot. This result supports the fact that *there are alternative sources of lead in the environment that caused the lead poisoning* in bald eagles. These alternative sources of lead are found in a much more soluble form than the lead in ammunition. Possible alternative sources of lead are old lead batteries, small galvanized hardware fasteners, plastics with lead stabilizers, shards of broken lead glass, weathered paint chips containing lead, lead contaminated land fills, legacy tetraethyl lead contaminated soil and pesticides containing lead.

The Report by the Nontoxic Shot Working Group also cites a study in which a golden eagle collected near Republic, Washington in 1999, and two additional golden eagles collected in early 2000 along the Columbia River near Wenatchee and at Cashmere, carried acute and toxic levels of lead. The Report states that "the sources of lead were unknown and that the sources could potentially include residues from [lead containing] pesticides used in orchards along the Columbia River. These residues could have been passed through the food chain to golden eagles, particularly through ground squirrels or other mammals that fed on or near orchards."

This statement also supports the fact that there is an alternative source of lead in the environment, and a plausible exposure pathway as raptors ingest lead by consuming lead poisoned squirrels.

Apparently, WDFW is investigating the likelihood that pesticides containing lead are poisoning ground squirrels and are making their way up the food chain to the raptors (i.e. eagles, hawks, etc.). WDFW has commenced a project to research possible sources of contamination in golden eagles, including studying their residency and range use. On WDFW's website under the "Project Description" the statement is made that the sources of lead contamination in golden eagles in Washington are presently *unknown.* In addition, WDFW is engaged in a project to research ground squirrel populations. Also on WDFW's website under the "Project Description" there is a statement that ground squirrels are important in the food chain and are a dietary staple for a host of avian and mammalian predators.

There are several facts that provide a strong correlation between the use of pesticides containing lead and the lead poisoning of raptors such as golden eagles, hawks and bald eagles. One key fact is that pesticides containing lead were once very prevalent in agricultural use, specifically on orchards. Lead

arsenate was the most extensively used insecticide across the United States before DDT and heavily used in Washington on orchards.

Lead arsenate can persist in the environment for a very long time. Years after orchard growers stopped using lead arsenate, high concentrations of lead can still be found in orchard soils. Due to its high solubility, lead arsenate can leach into the ground, groundwater and surface waters (i.e. the Columbia River) and migrate to soils downstream. Thus, the ground squirrels that live in burrows in and around orchards are very likely to be exposed to lead in the soil. Because ground squirrels have been shown to be a major diet item of hawks and golden eagles, this situation provides a plausible exposure pathway from lead in the soil.

WDFW states that trumpeter swans are the most visible evidence of lead poisoning. However, the report titled "Trumpeter Swan Lead Shot Poisoning Investigation in Northwest Washington and Southwest British Columbia" has determined after nearly a decade of investigation that there is not enough evidence to conclude that the lead poisoning in swans originates from lead shot used in upland game bird hunting.

Concerns Regarding Alternative Ammunition

The most likely used alternative ammunition is steel shot. But the use of steel shot has a major drawback for upland game hunting, as opposed to waterfowl hunting. In a waterfowl hunting situation, shots are directed into the air so there is little chance of the steel shot striking a hard object and causing ricochet. In an upland game hunting situation there are many situations where shots are fired in a more horizontal direction where they can strike hard objects such as rocks and trees. Such impacts can and do create dangerous ricochets putting hunters in the field at risk of serious harm. This is analogous to one's childhood experience involving BB's bouncing back off of walls, rocks and trees. The steel shot from a shotgun has considerably more velocity than a child's BB gun, and can inflict far more serious wounds.

There are also growing concerns with other types of alternative ammunition, as recent studies have been published regarding the concerns raised by the use of these alternative ammunition. In a well known report by the United States Army Corps of Engineers titled "Fate and Transport of Tungsten at Camp Edwards Small Arms Ranges," significant concerns were raised about soil and groundwater contamination associated with contaminants contained in alternative ammunition, as these contaminants are highly soluble and tend to migrate. Accordingly, more scientific analysis of alternative ammunition is warranted before passing regulations that require hunters and recreational shooters to use such alternatives.

In light of these considerations, the NRA respectfully asks the WDFW to seek a repeal of the 2011 lead ammunition ban for all upland game, dove and band-tailed pigeon hunting on all pheasant release sites statewide. Any new proposals for the 2012-2014 hunting seasons to further restrict the use of lead ammunition should not be considered at this time. Regulations to restrict the use of traditional lead-based ammunition are not supported by science, and WDFW should not seek to impose further regulations on hunters and recreational shooters.

The NRA appreciates the opportunity to provide comments to the WDFW and welcomes any questions or concerns WDFW may have regarding this matter.

Sincerely,
MICHEL & ASSOCIATES, P.C.

C.D. Michel

CDM/wls