Amend Division 1, Subdivision 2 and Sections 311, 353, 464, 465, 475, and 485
Repeal Section 355, and Add Section 250.1
Title 14, California Code of Regulations
Re: Prohibition on the Use of Lead Projectiles and Ammunition
Using Lead Projectiles for the Take of Wildlife with Firearms

Summary of Objections/Recommendations (Comments)

In developing the proposed regulations, the California Fish and Game Commission (Commission) complied with the Administrative Procedure Act (APA) (Gov. Code, § 11340 et seq.) and also prepared an Environmental Document pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) in compliance with the Commission's certified regulatory program (CRP) as approved by the Secretary for the California Natural Resources Agency (Pub. Resources Code, § 21080.5; CEQA Guidelines, §15251, subd. (b); Cal. Code Regs., 585. 14.)

The California Department of Fish and Wildlife (Department), on the Commission's behalf, conducted its own outreach in addition to what is required by the CRP, CEQA, and APA; that process is described in detail in the Draft and Final Environmental Documents as well as the Commission's Final Statement of Reasons.

During the CEQA and APA public review processes, more than 8,000 comments were received related to either the proposed rulemaking or the Commission's CEQA compliance. Comments received during the CEQA environmental review period and pertaining to the analysis of the proposed rulemaking's environmental impacts were responded to in the Final Document. Comments received during the CEQA comment period or the APA comment period, and pertaining to the rulemaking, are addressed in this Response to Comments.

To avoid inadvertently failing to respond to a relevant comment, where a comment could be interpreted to fall within either of those two categories, the Commission addresses the comment in both the Final ED and in this APA Response to Comments.

More than 5000 of the comments were form letters, and many of the comments raised were not unique. As a result, the attached tables identify the specific comments made by reference to the following list of "Comments and Responses to Comments." Table 1 lists the individual comments received by e-mail or hard copy. Table 2 summarizes individual comments received verbally.

Comments and Responses to Comments (Responses)

1. Alternatives to lead ammunition will not be available.

The Commission acknowledges differences of opinion regarding the extent to which alternatives to lead ammunition will be available and at what cost. As described in Response to Comment 11, the Commission has considered a variety of different opinions as to ammunition availability and cost. Moreover, the Commission recognizes that alternatives for some firearms, such as those that are of uncommon calibers may not be available even after the requirement becomes effective statewide by statute on July 1, 2019. Nonetheless, for the reasons described in Response to Comment 11, substantial evidence supports the Commission's conclusion that the phase-in set forth in the proposed rulemaking fulfills the Legislature's mandate that the Commission implement any of Fish and Game Code section 3004.5's requirements that can be implemented practicably, in whole or in part, in advance of July 1, 2019.

The Commission acknowledges that some confusion exists about possible future federal action through the United States Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF)'s implementation of the sporting purposes exemption to the federal prohibition of armor piercing ammunition. (See Response to Comment 15 for further explanation of this issue.) The Director has requested coordination between the two agencies regarding this topic and urged ATF to develop a proposed framework for applying the exemption that ensures the availability of nonlead alternatives that are both designed and principally used for hunting purposes. But, uncertainty about possible future federal action that may affect the availability of nonlead ammunition does not relieve the Commission of its obligation to implement subdivision (i) of Fish and Game Code section 3004.5. This provision requires that by July 1, 2015, the Commission must promulgate regulations that phase-in the statute's requirements, and that, if any of the statute's requirements can be implemented practicably, in whole or in part, in advance of July 1, 2019, the Commission shall do so.

2. <u>Incentives such as vouchers are necessary, or the regulation should allow for voluntary actions such as burying non-edible animal remains as an alternative to using nonlead projectiles.</u>

The Commission acknowledges the benefits of a program to offset the costs of nonlead ammunition. Fish and Game Code section 3004.5 provides a date certain (July 1, 2015), for the Commission to promulgate regulations that phase in the requirements of this section and provides that, if any of the requirements of this section can be implemented practicably, in whole or in part, in advance of July 1, 2019, the commission shall do so. Although Fish and Game Code section 3004.5 encourages the Commission to establish a coupon program to offset the costs of nonlead ammunition, such a program "shall be implemented only to the extent that sufficient funding, as determined by the Department of Finance, is obtained from local, federal, public, or other nonstate sources…." (Fish and Game Code section 3004.5(d)(2.) Although the Department is exploring potential funding options, funding is not currently available. There is no requirement to adopt regulations to implement a coupon program at this time. Although a coupon program could reduce the costs of compliance, such a program is not expected to increase the commercial availability of nonlead ammunition.

Regarding suggestions that the proposed regulation should allow for other voluntary actions, such as burying non-edible animal remains in the field as an alternatives to complying with the nonlead requirement, these suggestions do not take into account the Commission's obligation to implement subdivision (i) of Fish and Game Code section 3004.5. This provision requires that by July 1, 2015, the Commission must promulgate regulations that phase-in the statute's requirement to use nonlead ammunition when taking wildlife.

3. Regulation will increase cost of ammunition, decrease hunting, and have ripple economic impacts, including reductions in conservation funding in California.

The Commission acknowledges a difference of opinion regarding the extent to which alternatives to lead ammunition will be available and at what cost. As described in Response to Comment 11, the Department has considered a variety of different opinions as to ammunition availability and cost. Moreover, the Department recognizes that alternatives for some firearms, such as those that are of uncommon calibers, may not be available even after the requirement becomes effective statewide by statute on July 1, 2019. Nonetheless, for the reasons described in Response to Comment 11, substantial evidence supports the Commission's conclusion that the phase-in set forth in the proposed rulemaking fulfills the Legislature's mandate that the Commission implement any of Fish and Game Code section 3004.5's requirements that can be implemented practicably, in whole or in part, in advance of July 1, 2019.

The Commission similarly acknowledges a difference of opinion regarding the effect of the regulations on hunting activity and the ripple economic impacts. The Draft Environmental Document (ED) sets forth an analysis of those impacts, which is supported by substantial evidence. (See Draft ED at 3:23 – 3:29, incorporating by reference Appendix G "Standardized Regulatory Impact Assessment"). Notably, in a letter dated December 31, 2014, the Department of Finance concluded that the proposed rulemaking total estimated impact does not exceed the major regulation threshold of $50 million.

In addition, the Commission notes that pursuant to Fish and Game Code section 3004.5, nonlead ammunition will be required statewide for hunting as of July 1, 2019, regardless of any phase-in. Thus, only those phases of the proposed rulemaking that implement the requirement prior to July 1, 2019, have any economic impact as compared to "no project."

4. Skepticism regarding the impact of lead bullets on the environment, including expressions of concern about unintended impacts of nonlead alternatives, such as higher wounding rates.

Chapter 3 (Environmental Impacts) of the Draft ED prepared for this regulation includes substantial evidence that requiring nonlead ammunition will result in less than significant environmental impacts, including beneficial impacts to wildlife. Conversely, substantial evidence exists in the scientific literature that lead bullets in the environment have resulted in lead poisoning and mortality in a variety of non-target wildlife, including bald and golden eagles, turkey vultures and California condors. Regardless of the merits of the statute, State law

prohibits the use of lead projectiles when taking wildlife with a firearm as of July 1. 2019. Fish and Game Code section 3004.5 requires that by July 1, 2015, the Commission must promulgate regulations that phase-in the statute's requirements, and that, if any of the statute's requirements can be implemented practicably, in whole or in part, in advance of July 1, 2019, the Commission shall do so. (Fish and Game Code, section 3004.5, subd. (i).)

5. There has been no improvement in lead poisoning since the condor lead ban went into effect.

The results reported in the U.S. Fish and Wildlife Service's 2012 report to the Commission entitled "California Condor Recovery Program, Project Update and 2011 and 2012 Lead Exposure Report" (http://www.fgc.ca.gov/public/reports/californiacondorledreport2012.pdf) show that for the time period 2007-2012 the number of tests performed on condors that show no exposure to lead (defined as >15ug/dl blood) has increased from 97 in 2007 to 114 in 2012. It is incorrect to state incidences of lead poisoning in condors have not improved since the prohibition on the use of lead ammunition within the condor range was implemented prior to the start of the 2008 big-game hunting season; the data provided directly refutes that statement. Regardless of the merits of the statute, State law now prohibits use of lead projectiles when taking wildlife with a firearm as of July 1, 2019. Fish and Game Code section 3004.5 requires that by July 1, 2015, the Commission must promulgate regulations that phase-in the statute's requirements, and that, if any of the statute's requirements can be implemented practicably, in whole or in part, in advance of July 1, 2019, the Commission shall do so. (Fish and Game Code, section 3004.5, subd. (i).)

6. Norway and other jurisdictions have repealed their nonlead requirement.

Whether another country adopts laws that diverge from those of California does not affect the Commission's obligations pursuant subdivision (i) of Fish and Game Code section 3004.5. This provision requires that by July 1, 2015, the Commission must promulgate regulations that phase-in the statute's requirements, and that, if any of the statute's requirements can be implemented practicably, in whole or in part, in advance of July 1, 2019, the Commission shall do so.

7. Expressed concern about the proposed certification process, and questions whether state has expertise to identify lead free alternatives when certifying projectiles and ammunition as nonlead.

Since 2008, use of nonlead ammunition has been required in an area of the state designated as the California condor range. The certification process proposed in subdivision (f) of Title 14 section 250.1 is substantially unchanged from the certification process established by the Commission in 2008 when it adopted Title 14 section 355. Under both the existing and proposed certification processes, producers of ammunition or projectiles must submit, with a signed statement verifying its accuracy, information regarding the characteristics of the ammunition or projectiles. Within 60 days, the Department determines whether a projectile

contains less than one percent lead content based solely upon the information submitted by the manufacturer. The Commission is not aware of any problems that have arisen during seven years of implementing this certification process.

8. Iowa State University shows lead ammunition is not affecting bald eagle populations.

Lead ammunition had been an important source of mortality in bald eagles prior to the prohibition on the use of lead for waterfowl hunting. Given their winter feeding habits (dead/dying waterfowl are an important food source) it is not surprising that lead blood levels may be declining to such an extent that lead poisoning is no longer impacting this species on a population level. However, a recent (2014) study published in the Journal of Wildlife Management (Bald Eagle Lead Exposure in the Upper Midwest) found that 22 (38%) of 58 bald eagle carcasses showed lead levels identified as being within the "lethal" range (liver lead levels which are $\geq$ 6.0 mg/kg). Although lead poisoning may not be contributing to population level impacts for bald eagles in some locations, recent studies indicate lead has impacts on individual animals, which may lead to mortality events.

Regardless of the merits of the statute, State law prohibits use of lead projectiles when taking wildlife with a firearm as of July 1, 2019. Fish and Game Code section 3004.5 requires that by July 1, 2015, the Commission must promulgate regulations that phase-in the statute's requirements, and that, if any of the statute's requirements can be implemented practicably, in whole or in part, in advance of July 1, 2019, the Commission shall do so. (Fish and Game Code, section 3004.5, subd. (i).)

Reference: Sarah E. Warner, Edward E. Britton, Drew N. Becker, and Michael J. Coffey (2014) Bald Eagle Lead Exposure in the Upper Midwest. Journal of Fish and Wildlife Management: December 2014, Vol. 5, No. 2, pp. 208-216.

9. The Department had the California Condor Recovery Program, Project Update and 2011 and 2012 Lead Exposure Report as early as April 2013, but the USFWS didn't make it publicly available until after AB 711 became law.

The California Condor Recovery Program, Project Update and 2011 and 2012 Lead Exposure Report was provided to the Commission with a date stamp of October 29, 2013 (http://www.fgc.ca.gov/public/reports/californiacondorleadreport2012.pdf). But, regardless of when the U.S. Fish and Wildlife Service drafted and made this report available, Fish and Game Code section 3004.5 requires that by July 1, 2015, the Commission must promulgate regulations that phase-in the statute's requirements, and that, if any of the statute's requirements can be implemented practicably, in whole or in part, in advance of July 1, 2019, the Commission shall do so. (Fish and Game Code, section 3004.5, subd. (i).)

10. Hunting with lead ammunition does not result in a human health risk.

Commenters stated that lead ammunition does not result in a human health risk, and/or that Fish and Game section 3004.5's requirement to use nonlead ammunition would not reduce a human health risk. Regardless of the merits of the statute, it prohibits use of lead projectiles when taking wildlife with a firearm. Fish and Game Code section 3004.5 requires that by July 1, 2015, the Commission must promulgate regulations that phase-in the statute's requirements, and that, if any of the statute's requirements can be implemented practicably, in whole or in part, in advance of July 1, 2019, the Commission shall do so. (Fish and Game Code, section 3004.5, subd. (i).)

11. Phasing must be practicable, and encourages less expedited phasing.

Commenters, National Rifle Association (NRA) and California Rifle & Pistol Association (CRPA) correctly note that Fish and Game Code section 3004.5 provides that the phase-in of the nonlead ammunition requirement must be practicable. In addition, Fish and Game Code section 3004.5 requires the Commission to implement any of Fish and Game Code section 3004.5's requirements, in whole or in part, if they can be implemented practicably.

To interpret the Legislature's intended meaning of "practicably," the Department, on the Commission's behalf, first looked at the statute's terms. As described on pages 2:3 to 2:4 of the Draft ED, the statute includes several provisions that suggest the Legislature intended the requirement to be implemented swiftly and before July 1, 2019. Most obviously, the statute requires, no later than July 1, 2019, that nonlead ammunition shall be required when taking all wildlife. Where nonlead ammunition is not commercially available, the statute provides an exception only in a very limited circumstance, if the Director makes a finding that a specific caliber is not commercially available from any manufacturer because of federal prohibitions relating to armor-piercing ammunition pursuant to chapter 44 of Title 18 of the United States Code. Even if the law is suspended for this reason, however, the existing limitations on the use of lead ammunition in the California condor range would remain in effect. (Section 3004.5(j)(1) and (2).) This narrow exception demonstrates the Legislature anticipated that after the requirement goes into effect statewide on July 1, 2019, hunters would be reliant upon a limited supply of nonlead ammunition, perhaps even a supply that would not be considered "commercially available." Nothing in the law or its legislative history suggests the Legislature believed supplies of nonlead ammunition would be so ample that there would be no change in cost or availability of ammunition for hunters.

Notwithstanding the Legislature's knowledge that nonlead ammunition might not be commercially available even after 2019, the statute requires the Commission to promulgate regulations to phase-in any of Fish and Game Code section 3004.5's requirements that could be implemented "practicably." The Legislature's findings further emphasize the urgency expressed by the statute's mandate to phase-in the nonlead requirement, noting the value of California's wildlife species and environmental health, research establishing the threat posed by lead in the environment, and the success of prior efforts to limit wildlife exposure to lead ammunition.

To determine whether any phasing would be "practicable," the Department, on the Commission's behalf, conducted an extensive pre-notice public outreach effort between January and October of 2014. At the January 15, 2014, meeting of the Commission's Wildlife Resources Committee (WRC) in Van Nuys, the Department introduced a "starting point" proposal that outlined a potential four-year phase-in for nonlead ammunition. The starting point proposal was based on Department's understanding of the current availability of nonlead ammunition and became the focal point for a series of public meetings throughout the state from Susanville to San Diego. In addition to public workshops, on the Commission's behalf, the Department also sought public input at international sporting goods shows and at meetings of the National Wild Turkey Federation in Vacaville, Ducks Unlimited in Corning, and the Director's Hunting Advisory Committee in Sacramento.

On July 28, 2014, the Department presented an update of its outreach efforts as well as planned future efforts at the Commission's WRC meeting in Sacramento. At this meeting, the Commission received testimony by Dr. Vernon G. Thomas of the University of Guelph in Canada on behalf of Audubon California, Defenders of Wildlife and the Humane Society of the United States on his survey of the current availability of nonlead ammunition in California.

On September 17, 2014, the Department presented a public review draft of the proposed regulatory text at the Commission's WRC meeting in Sacramento. At this meeting, the Commission received testimony by Mr. Scott Scherbinski of Pinnacles National Park and Mr. Ben Smith of the Institute for Wildlife Studies, on reducing the impact of lead ammunition in California. Testimony was also received from Mr. Rob Southwick of Southwick Associates on behalf of the National Shooting Sports Foundation on the potential effects of the nonlead ammunition requirement on hunting participation in California and associated economic measures.

In addition to public workshops and meetings, the Department contacted representatives of the ammunition manufacturing and distribution sectors for their input on the proposed phasing. A meeting with ammunition retailers was held at the Yolo Basin Wildlife Area on September 3, 2014. Letters requesting input from major ammunition manufacturers were sent on August 26, 2014, to Barnes Bullets, Inc., Federal Premium Ammunition, Hornady Manufacturing, Kent Cartridge, Magtech Ammunition Company, Inc., Nosler, Remington Arms Company, LLC, Weatherby, Inc., and Winchester Ammunition. To date, the Department has received no response or input from any individual manufacturer despite the Department's outreach.

In the course of this research, conflicting information regarding market availability and overall cost has been presented by proponents and opponents of the law, which information has informed the Commission's development of the phasing of the proposed program. As mentioned by the NRA and CRPA in their April 8, 2015 letter, one study, sponsored by the NSSF (Southwick Associates, 2014), predicts that hunting participation in California may drop by as

much as 36 percent as a result of the proposed regulations. Finally, according to this study, ammunition manufacturers have indicated they will not be sufficiently increasing production of nonlead ammunition to meet the demand the legislation will create in California. Interestingly, the same analysis illustrates California's demand for new nonlead products, which presumably would result in new markets. (Southwick Associates, 2014).

However, another study sponsored by Audubon California, Defenders of Wildlife, and the Humane Society of the United States (Thomas, 2014) concluded that hunting participation would not be substantially affected because nonlead ammunition is already commercially available and a two year transition period will be adequate to allow manufacturers to adjust for the anticipated increase in demand.

In its February 13, 2015 comment letter, Ventana Wildlife Society reported the results of its research regarding the availability of nonlead ammunition. That letter indicates that Ventana Wildlife Society staff have successfully purchased significant quantities of nonlead ammunition in a variety of calibers. That letter also states that California's past experience placing controls on lead ammunition shows that a statewide requirement "will spur production of nonlead products, adding to the supply of alternatives available to California hunters."

Research conducted by the Department on behalf of the Commission indicates that while many different nonlead bullets and cartridges have been certified by the Commission and are advertised for sale by different manufacturers, many are actually limited in availability for purchase either in sporting goods stores that typically sell ammunition or from on-line vendors. Furthermore, bullets and cartridges for calibers considered to be "uncommon" are essentially unavailable for purchase. Moreover, even if nonlead ammunition is available for purchase, the ammunition may not be available to meet the volume of demand created by Fish and Game Code section 3004.5. Additionally, costs are often higher for nonlead ammunition of all calibers.

Because of existing uncertainty over the future availability and cost of nonlead ammunition, the Department, on the Commission's behalf, evaluated a range of potential price increases to estimate the phase-in's economic impact on hunters. In doing so, the analysis noted that traditional ammunition prices have been increasing at unprecedented rates; for some calibers, prices have increased by two or three times since 2008. The retail cost of nonlead ammunition varies widely, depending on the caliber and design of the cartridge or projectile. Currently, nonlead ammunition can range from 30% more to as much as twice the price of the lead counterpart, presumably due to smaller production runs and higher component prices. In comparing market prices it depends on whether the comparison is between two premium versions in lead and nonlead, where the nonlead version may be 30 percent higher than the lead price. In contrast, comparing a lower grade lead bullet to a premium grade nonlead bullet, the price may be 50% to twice the price of the lead version. In some instances, the nonlead version is the same or less than the premium version of the lead bullet. The Southwick Associates study predicted that supply shortfalls could push centerfire nonlead ammunition prices up to nearly three times the price of the lead counterpart. Given this variation, the Department, on the Commission's behalf, used a range of proposed nonlead ammunition price

increases but chose to work principally with the estimated nonlead ammunition cost increase of nearly twice as much or, "on average, up to 190% more than the equivalent traditional ammunition."

In addition, the economic analysis considered supply bottlenecks. Factors that could influence availability and price of nonlead ammunition include, for example, the price of component materials; ammunition sector investment and innovation, U.S. military demand, ATF's determinations on non-lead ammunition, legislation (such as Senate Bill 53, 2014) that would limit internet purchases of ammunition; and any number of factors outside the Commission's sphere of influence.

Informed by this public feedback and data, the Department, on the Commission's behalf, considered a range of potential reductions in hunting activity: 5 percent, 10 percent, and a drop of 13 percent based on the report by Southwick Associates. (Southwick Associates, 2014.) The Standardized Regulatory Impact Assessment, included within the Draft ED, also considered the potential impact of each successive phase at a range of potential hunting reduction rates. (Draft ED at Appendix G-15.) These potential reductions in hunting activity were then evaluated in light of data from the California condor range, where nonlead ammunition for the take of big game has been required since 2008, implementation of the federally mandated nontoxic shot requirement when taking waterfowl, and published research on the price elasticity of demand for hunting. Based on that analysis, the Draft ED concluded that it is reasonable to assume an anticipated decline in hunting activity of less than 5 percent (Draft ED at 3:26 – 3:27; Id. Appendix G-16 to G-17.)

The Commission acknowledges a difference of opinion as to the likely cost and availability of nonlead ammunition. After considering the analysis summarized above, the Commission determined that substantial evidence supports the conclusion that the proposed modifications to Title 14 implement those portions of Fish and Game Code section 3004.5 that can be practicably implemented.

Notably, the NRA's and CRPA's April 8, 2015 comment letter states that because of the unavailability of alternative ammunition it is not "practicable" for the Commission to expect hunters to be able to comply with the proposed regulations at this time. "Indeed, the Commission should propose mitigation measures that delay implementation of the regulations for as long as necessary, to allow alternative ammunition used in ceratin [sic] calibers that are popular with hunters to become more available." However, this comment overlooks the fact that, by statute, the requirement to use nonlead ammunition becomes effective statewide in 2019; the Commission has no authority to modify that requirement. Moreover, in designing proposed phase-in of the nonlead ammunition requirement, the Commission acknowledged the uncertainty regarding the retail availability of nonlead ammunition. That is why phase one only applies to the approximately 14 big horn sheep hunters per season and those who hunt on Department land. All other rifle hunting, including use of centerfire and rimfire ammunition, is deferred until the last date possible (July 1, 2019).

12. <u>If Commission proceeds with phasing, there must be an exemption if ammunition is not available.</u>

Fish and Game Code section 3004.5 requires the Commission to phase-in any of Fish and Game Code section 3004.5's requirements that could be implemented "practicably," but does not suggest that "practicably" means "in those circumstances where ammunition is available." To interpret the legislature's intended meaning of "practicably," the Department, on the Commission's behalf, first looked at the statute's terms. As described on pages 2:3 to 2:4 of the Draft ED, the statute includes several provisions that suggest the Legislature intended the requirement to be implemented swiftly and before July 1, 2019. Most obviously, the statute requires, no later than July 1, 2019, that nonlead ammunition shall be required when taking all wildlife. Where nonlead ammunition is not commercially available, the statute provides an exception only in a very limited circumstance, if the Director makes a finding that a specific a caliber is not commercially available from any manufacturer because of federal prohibitions relating to armor-piercing ammunition pursuant to chapter 44 of Title 18 of the United States Code. Even if the law is suspended for this reason, however, the existing limitations on the use of lead ammunition in the California condor range would remain in effect. (Fish and Game Code section 3004.5(j)(1) and (2).) This narrow exception demonstrates the Legislature anticipated that after the requirement goes into effect statewide on July 1, 2019, hunters would be reliant upon a limited supply of nonlead ammunition, perhaps even a supply that would not be considered "commercially available." Nothing in the law or its legislative history suggests the Legislature believed supplies of nonlead ammunition would be so ample that there would be no change in cost or availability of ammunition for hunters.

Notwithstanding the Legislature's knowledge that nonlead ammunition might not be commercially available even after 2019, the Legislature required the Commission to promulgate regulations to phase-in any of Fish and Game Code section 3004.5's requirements that could be implemented "practicably." The Department and Commission conducted extensive public outreach, sought input from manufacturers and the hunting community, and chose to defer most of the implementation of Fish and Game Code section 3004.5 to the last possible time, July 1, 2019.

Moreover, the Department recognizes that alternatives for some firearms, such as those that are of uncommon calibers may not be available even after the requirement becomes effective statewide by statute on July 1, 2019. Nonetheless, for the reasons described above and in Response to Comment 11, substantial evidence supports the Commission's conclusion that the phase-in set forth in the proposed rulemaking fulfills the Legislature's mandate that the Commission implement any of Fish and Game Code section 3004.5's requirements that can be implemented practicably, in whole or in part, in advance of July 1, 2019.

13. <u>Expresses concern about how the regulations will be enforced, and notes the Commission has provided no explanation as to the verification process for wardens checking ammunition in the field.</u>

The Commission appreciates the interests of commenters in the law enforcement investigative techniques that will be utilized by Wildlife Officers to enforce the proposed regulations, but this issue is beyond the scope of the proposed regulatory action.

The Commission notes that use of nonlead centerfire ammunition has been required in an area of the state designated as the California condor range since 2008. Since 1991, nontoxic shot has been required when taking waterfowl nationwide. Wildlife Officers have proven their ability to successfully investigate violations and enforce these laws for many years using traditional law enforcement tools and techniques.

14. <u>It is not practicable to implement regulations absent a framework to guide the Department Director's authority to suspend the nonlead requirement because of federal prohibitions relating to armor-piercing ammunition.</u>

The Commission acknowledges that some confusion exists about possible future federal action through ATF's implementation of the sporting purposes exemption to the federal prohibition of armor piercing ammunition. The Director has requested coordination between the two agencies regarding this topic and urged ATF to develop a proposed framework for applying the exemption that ensures the availability of nonlead alternatives that are both designed and principally used for hunting purposes. But, uncertainty about possible future federal action that may affect the availability of nonlead ammunition does not relieve the Commission of its obligation to implement subdivision (i) of Fish and Game Code section 3004.5. This provision requires that by July 1, 2015, the Commission must promulgate regulations that phase-in the statute's requirements, and that, if any of the statute's requirements can be implemented practicably, in whole or in part, in advance of July 1, 2019, the Commission shall do so. There is no corresponding requirement to adopt regulations implementing the Director's statutory authority to temporarily suspend the prohibition, and this authority is sufficiently specific to allow for implementation without the aid of interpretive regulations. As described in the Initial Statement of Reasons, the specific purpose of this regulatory action is to phase in the requirement to use nonlead ammunition when taking wildlife with a firearm not later than July 2019.

15. <u>ATF's testimony to Congress indicated ATF will not approve any manufacturer's requests for certification of nonlead ammunition, so the transition to nonlead ammunition will be even slower than assumed by the Commission when assessing what phasing will be practicable.</u>

This comment mischaracterizes the testimony of ATF Director Jones when he addressed questions in a congressional subcommittee in March. ATF regulations provide that "a person who desires to obtain an exemption under this section for [armor piercing ammunition] which is primarily intended for sporting purposes…shall submit a written request to the [ATF] Director." (27 CFR 478.148.) In the past, ATF has granted exemption requests. But, since 2011, ATF has received about 30 requests from manufacturers, and they have neither granted nor denied the requests. In February, ATF invited comments on a draft framework for processing

these outstanding requests. They also applied the draft framework to the prior exemptions that were granted, and proposed rescinding the exemption for one of those cartridges. The Department, along with thousands of other commenters, expressed some concerns about ATF's proposed framework, and ATF has subsequently withdrawn it. Now, ATF reports it is studying all the input it received, and will propose a different approach for applying the sporting purposes exemption in the future.

In his testimony to congress, Director Jones indicated ATF needs to develop a method of applying the sporting purposes exemption. He said, "We need to deal with the pending [requests for] exemptions. There aren't going to be any new exemptions granted until we work our way out through this." The Commission does not interpret this statement as meaning ATF will not ever grant a request for exemption. Instead, this appears to be an acknowledgement that ATF needs to develop a method or "framework" for processing pending and future requests for sporting purposes exemptions. How this affects the availability of nonlead will depend upon what ATF produces, but at this point it appears that the status quo will continue. If ATF produces a workable framework that considers the intended use of nonlead rifle ammunition, it could result in more nonlead options coming available.

As described in the Response to Comments 11 and 12, the Commission recognizes that there is uncertainty about the future availability of nonlead ammunition, and that is why the regulation defers most of the implementation of Fish and Game Code section 3004.5 to the last possible time, July 1, 2019.

16. <u>Expresses concern about ignition risks of nonlead projectiles.</u>

Pages 3:14 to 3:17 of the Draft ED address ignition risk. In sum, and as supported by substantial evidence in that discussion, no information currently exists indicating that the use of nonlead ammunition for sport hunting purposes will significantly increase wildfire events in California. Information that is available suggests relatively low levels of wildfires are caused by shooting of all types, with target shooting identified as the cause in most of the cases. This activity remains unaffected by the project because the statute mandates the use of nonlead ammunition for take of wildlife and not for target shooting. Due to the conditions under which nonlead ammunition is used while sport hunting and the relatively low incidence of wildfire than can realistically be attributed to projectiles shot by sport hunters, the potential increase in the frequency of wildfires is considered to be less than significant as compared to existing conditions.

17. <u>Until AB 711 is fully implemented in 2019, hunting regulation booklets should include a health advisory.</u>

Commenter raises concerns about the proposed regulation's impact on human beings who consume wild game shot with lead ammunition. Commenter states that the California Environmental Quality Act Guidelines' mandatory findings of significance include where environmental effects of a project will cause substantial adverse effects on human beings either

directly or indirectly. Commenter requests that future hunting regulation booklets include an advisory that alerts hunters to the implementation of the ban on lead ammunition.

Page 7 of the 2014-2015 Hunting Regulations booklet (Mammal Edition) contains an advisory regarding use of lead in the condor range, and it specifically states that lead has been banned from many materials because of its toxicity to humans and wildlife. The proposed regulations implement the statutory mandate to require the use of nonlead projectiles and ammunition for the take of wildlife statewide, and to implement that requirement no later than July 1, 2019 or earlier if practicable. The proposed regulations implement the requirement in three phases, two of which precede the July 1, 2019 date on which the requirement must be implemented statewide. In addition, as compared to the existing environment, the proposed rulemaking will reduce the use of lead ammunition and reduce lead in the environment.

18. <u>Generally opposed to requiring nonlead ammunition and/or AB 711; encourages an alternative, voluntary approach.</u>

The Commission appreciates diverse viewpoints regarding the merits of requiring nonlead ammunition as compared to, for example, encouraging a voluntary transition to nonlead ammunition. However, the Commission is not relieved of its obligation to implement subdivision (i) of Fish and Game Code section 3004.5. This provision requires that by July 1, 2015, the Commission must promulgate regulations that phase-in the statute's requirements, and that, if any of the statute's requirements can be implemented practicably, in whole or in part, in advance of July 1, 2019, the Commission shall do so.

19. <u>Licensed game clubs and outfitters should be phased in earlier.</u>

The adopted phase-in schedule was developed considering the cost and market availability issues California hunters are currently experiencing and are expected to face as California makes the switch from traditional lead ammunition to nonlead substitutes. Because non-lead ammunition used for waterfowl can also be used for many upland hunting situations, the regulation will require the use of non-lead ammunition for all hunting purposes on Department lands beginning in 2015. To also require it of licensed game bird clubs at the same time may lead to supply problems for hunters using Department lands. Additionally, these areas have received heavy use for many years and switching to non-lead ammunition would not result in a "cleaner" environment on those areas or produce any positive wildlife impacts (birds shot on these areas are all pen-raised).

Outfitters taking clients on waterfowl hunts are already required to ensure their hunters are using appropriate non-lead ammunition. Given the current issues big-game hunters are experiencing obtaining non-lead substitutes, requiring big-game outfitters and their clients to use non-lead ammunition before the regulations specified date (July 1, 2019) could also lead to shortages in supply impacting all big-game hunters on a statewide basis.

20. Need alternatives for taking non-game small animals including burrowing animals and those that carry disease.

Commenter states that nonlead ammunition will be unavailable, and, as a result, the populations of small game, non-game, and pests will naturally increase because the unavailability and increased cost of alternative ammunition will significantly lower the number of hunters in California, and conversely the amount of wildlife taken by hunters and others. Commenter states that small game, non-game, and pests are generally burrowing animals. The commenter requests analysis of several categories of impacts (i.e., ecosystem, human health from disease outbreak, agriculture, levees) that might potentially occur as a result of increased numbers of these animals.

Substantial evidence demonstrates that "nuisance" (for example, rabbits, rodents, and ground squirrels) wildlife populations are not kept in check predominately by shooting. There are numerous other methods actively employed to temporarily reduce those populations, including shooting them with various calibers of frangible bullets already on the Department's certified nonlead ammunition list (available at http://www.dfg.ca.gov/wildlife/hunting/lead-free/certifiedammo.html.)

Live-trapping (then euthanizing) and/or species specific poisons are the primary method used for controlling populations of rodents which may carry various human disease vectors or air-borne diseases such as hanta-virus. These activities often occur in rural/urban interfaces or in areas such as campgrounds where shooting is not an option. Commenter provides no substantial evidence necessitating a change to the Draft ED's conclusion that the Proposed Program's impacts are less than significant.

21. The Commission received several comments regarding proposed regulatory actions of other agencies, including ATF's proposed framework and a state Department of Justice proposed regulatory action regarding firearm safety certification.

These comments are beyond the scope of the Commission's proposed action. Most of the misdirected comments described above criticize ATF's proposed framework for determining whether certain projects are "primarily intended for sporting purposes" within the meaning of federal law (18 U.S.C. section 921(a)(17)(C).) On March 10, 2015, ATF issued a notice announcing that the Bureau would not proceed with the proposed framework. https://www.atf.gov/press/releases/2015-03-021015-advisory-notice-those-commenting-armor-piercing-ammunition-exemption-framework.html. See Response to Comment 15 for further explanation of this issue.

22. There are other sources of lead in the environment/recommends monitoring for copper.

The Commission as well as the Legislature appreciate that there are other sources of lead in the environment. In enacting AB 711, the Legislature found that "[r]outes of human and wildlife exposure to lead include contaminated air, water, soil, and food." The Legislature also noted

that "Lead is a potent neurotoxin, for which no safe exposure level exists for humans. The use of lead has been outlawed in and removed from paint, gasoline, children's toys, and many other items to protect human health and wildlife."

The Commission appreciates diverse viewpoints regarding the merits of requiring nonlead ammunition, concerns about the impacts of alternative ammunition, and interest in collecting data as to the impacts of nonlead alternatives. However, as set forth in the Draft ED's analysis of water quality impacts, there is no substantial evidence that there will be significant impacts associated with increased copper deposition from hunter activities. (Draft ED at 3:21.). However, the Commission is not relieved of its obligation to implement subdivision (i) of Fish and Game Code section 3004.5. This provision requires that by July 1, 2015, the Commission must promulgate regulations that phase-in the statute's requirements, and that, if any of the statute's requirements can be implemented practicably, in whole or in part, in advance of July 1, 2019, the Commission shall do so.

23. Encourages more expedited phasing.

On the Commission's behalf, the Department considered alternatives to the proposed rulemaking. These included: (1) an "early implementation alternative," whereby nonlead ammunition would be required statewide by July 1, 2015 (or as early as the rulemaking process would allow); and (2) a modified phasing alternative, which would advance the implementation process by combining phases 1 and 2 of the proposed rulemaking with an effective date of July 1, 2015. As set forth in response to comment 11, a difference of opinion exists as to the extent to which nonlead ammunition will be available in sufficient quantities. However, after considering the data available, the Department, on the Commission's behalf, determined that uncertainty regarding retail availability rendered it in impracticable to require such expedited phasing.

24. Encourages state to eliminate additional toxics.

Commenter states that California should eliminate additional toxics from ammunition. Whether the Legislature chooses to eliminate additional toxics does not affect the Commission's current obligations pursuant subdivision (i) of Fish and Game Code section 3004.5. This provision requires that by July 1, 2015, the Commission must promulgate regulations that phase-in the statute's requirements, and that, if any of the statute's requirements can be implemented practicably, in whole or in part, in advance of July 1, 2019, the Commission shall do so.

25. Supports statute.

The Commission acknowledges the commenters support for the statute. No further response is necessary.

26. Supports regulation.

The Commission acknowledges the commenters support for the rulemaking. No further response is necessary.

27. Nonlead ammunition is available, and/or its availability will increase with growing market demand.

The Commission acknowledges differences of opinion regarding the extent to which alternatives to lead ammunition will be available and at what cost. As described in Response to Comment 11, the Department has considered a variety of different opinions as to ammunition availability and cost. Moreover, the Department recognizes that alternatives for some firearms, such as those that are of uncommon calibers may not be available even after the requirement becomes effective statewide by statute on July 1, 2019. Nonetheless, for the reasons described in Response to Comment 11, substantial evidence supports the Commission's conclusion that the phase-in set forth in the proposed rulemaking fulfills the Legislature's mandate that the Commission implement any of Fish and Game Code section 3004.5's requirements that can be implemented practicably, in whole or in part, in advance of July 1, 2019.

28. Cover e-mail or other communication that does not include a comment.

Because no comment is included, no further response is necessary.

29. Commissioner Sutton has an apparent conflict of interest and should have been recused.

The Commission acknowledges the commenter's concern regarding potential conflicts of interests and recognizes that Commissioners must comply with state laws related to conflicts of interest and the Commission's Conflict of Interest Code. The Commission values the diversity of experiences, perspectives, and points of view represented by each of its Commissioners regarding the use and conservation of California's natural resources, and notes that the Commission is statutorily required to implement subdivision (i) of Fish and Game Code section 3004.5. The Commission's decision will not have any financial effect on Commissioner Sutton's employer or a reasonably foreseeable material financial effect on the commissioner's compensation, and, therefore, no conflict of interest exists. This provision requires that by July 1, 2015, the Commission must promulgate regulations that phase-in the statute's requirements, and that, if any of the statute's requirements can be implemented practicably, in whole or in part, in advance of July 1, 2019, the Commission shall do so.

Table 1: Comments received by e-mail or hard copy.

The Responses to Comments referenced in “Table 1” can be found on the accompanying disk named “Nonlead Written Comments.” The attached disk contains an Excel table which includes hyperlinks to every comment submitted electronically or in hard copy which are also contained in the subfolder named “001”.

Table 2: Summary of verbal comments.

Commenter Number	Commenter	Date	Summary of Comment	Response
1	Senator Jean Fuller, California State Senator	Testimony at 2/12/15 Commission Meeting	A. Concerned about AB711 implementation. B. Opposes expedited implementation. C. Price increases will reduce hunting. D. Concerned about federal ammunition ban on armor piercing rounds. E. Ban will cause significant economic issues. F. Many European countries are repealing their nonlead ban.	A. See Response 11 B. See Response 12 C. See Response 3 D. See Response 12 E. See Response 3 F. See Response 6
2	Marilyn Jasper, Public Interest Coalition	Testimony at 2/12/15 Commission Meeting	A. Supports accelerated implementation. B. Remains concerned about lead ammunition fragmentation in carcasses. C. Possible alternatives like burying entrails will not be effective. D. Draft environmental documents is excellent.	A. See Response 23 B. See Response 26 C. See Response 26 D. Support noted
3	Eric Mills, Action for Animals	Testimony at 2/12/15 Commission Meeting	A. Supports accelerated implementation. B. Nonlead ammunition demand will be high enough to provide incentives for ammunition	A. See Response 23 B. See Response 27

Commenter Number	Commenter	Date	Summary of Comment	Response
			manufacturers.	
4	Kathy Lynch, National Shooting Sports Foundation, California Trappers Association, Safari Club International, Outdoor Sportman's Coalition, & Lynch and Associates	Testimony at 2/12/15 Commission Meeting	A. There is mis-communication about the availability of nonlead ammunition. B. Their Southwick report provides more economic information. C. The final condor report demonstrates a lack of science. D. The proposed regulations are silent on the measures to provide exceptions. E. Colorado tabled their nonlead ban and Norway and Sweden have repealed their bans due to the lack of science.	A. See Response 18 B. See Response 3 C. See Response 5 D. See Response 14 E. See Response 6
5	Dan Demers, California Trappers Association	Testimony at 2/12/15 Commission Meeting	A. The ban will cause ammunition makers to abandon California hunters. B. Nonlead ammunition is hard to find. C. There are no reloading materials available. D. We need an exemption for antique rifles. E. Supports proposed phased schedule.	A. See Response 3 B. See Response 1 C. See Response 1 D. See Response 12 E. See Response 26
6	Juan Altamirano, California	Testimony at 2/12/15	A. Supports proposed	A. See Response 26

Commenter Number	Commenter	Date	Summary of Comment	Response
	Audubon	Commission Meeting	phased schedule. B. Appreciates Department's outreach efforts.	B. Support noted
7	Jennifer Fearing, Humane Society of the United States	Testimony at 2/12/15 Commission Meeting	A. Appreciates Department's outreach efforts. B. The outreach attendees did not provide enough feedback on the proposed regulations and focused on the underlying legislation instead. C. Can accept the proposed phased schedule. D. Feels the Southwick report is flawed. E. Legislation provides for an exemption process for a federal ban on armor piercing rounds and lack of ammunition availability.	A. Support noted B. Comment noted. C. See Response 26 D. Comment noted E. See Response 25
8	Pamela Flick, Defenders of Wildlife	Testimony at 2/12/15 Commission Meeting	A. Appreciates Department's outreach efforts. B. Can accept the proposed phased schedule. C. The outreach attendees did not provide enough feedback on the proposed regulations and focused	A. Support noted B. See Response 26 C. Comment noted

Commenter Number	Commenter	Date	Summary of Comment	Response
			on the underlying legislation instead.	
9	Josh Brones, U.S. Sportmen's Alliance & Al Taucher Conservation Coalition	Testimony at 2/12/15 Commission Meeting	A. Despite good Department outreach, he remains concerned about nonlead ammunition availability and the nonlead certification process.	A. See Responses 1, 7, 12, and 13
10	Ed Worley, National Rifle Association	Testimony at 2/12/15 Commission Meeting	A. Feels that the nonlead science will continue to evolve. B. Appreciates Department's outreach efforts. C. Will continue to work with the Department to solve issues as they arise. D. Firearms industry will not be able to meet the nonlead ammunition demand.	A. See Responses 4, 25 B. Support noted C. See Response 26 D. See Response 1
11	Tom Pederson, California Rifle and Pistol Association	Testimony at 2/12/15 Commission Meeting	A. Concerned that the implementation lacks specific steps for an exemption process for a federal ban on armor piercing rounds and lack of nonlead ammunition availability.	A. See Responses 1, 12, 13, and 14
12	Rick Bullock, Agricultural Preservation and Environmental Conservation	Testimony at 2/12/15 Commission Meeting	A. Concerned that the implementation lacks specific steps for an	A. See Responses 1, 12, 13, and 14

Commenter Number	Commenter	Date	Summary of Comment	Response
	Sportsmen (APECS) Society, California Deer Association, Mule Deer Foundation, & Mendocino County Blacktail Association.		exemption process for a federal ban on armor piercing rounds and lack of nonlead ammunition availability.	
13	Jennifer Fearing, Humane Society of the United States	Testimony at 4/9/15 Commission Meeting	A. Supports the proposed regulations and thanked the Department for their efforts.	A. See Response 26
14	Randy Morrison, Mule Deer Foundation	Testimony at 4/9/15 Commission Meeting	A. Concerned that the regulations lacks specific process for lack of nonlead ammunition availability.	A. See Response 1, 12, and 14
15	Kelly Kester, Wild Care	Testimony at 4/9/15 Commission Meeting	A. Supports the proposed regulations B. Request tracking of implementation effectiveness.	A. See Response 26 B. The purpose of this regulation change is to implement Fish and Game Code section 3004.5. The impacts resulting from the implementation of this regulation that can be tracked will include annual licenses sales (to determine loss of hunters and amount of revenue reductions, if any), condor lead level results as provided to the Commission by the FWS-Condor recovery team, and documentation of lead related incidents (die-

Commenter Number	Commenter	Date	Summary of Comment	Response
				offs, unusual behavior (primarily raptors) leading to capture and treatment) from a variety of sources including the Wildlife Investigations Lab and wildlife rehabilitation facilities.
16	Rick Bullock, Agricultural Preservation and Environmental Conservation Sportsmen (APECS) Society	Testimony at 4/9/15 Commission Meeting	A. Concerned about nonlead ammunition availability. B. Supports establishment of specific triggers mechanisms for nonlead exceptions.	A. See Response 1 B. See Responses 12 and 14
17	Josh Brones, U.S. Sportmen's Alliance & Al Taucher Conservation Coalition	Testimony at 4/9/15 Commission Meeting	A. Supports establishment of specific triggers mechanisms for nonlead exceptions.	A. See Responses 12 and 14
18	Juan Altamirano, California Audubon	Testimony at 4/9/15 Commission Meeting	A. Supports the proposed regulations and thanked the Department for their efforts.	A. See Response 26
19	Dave Halbrook	Testimony at 4/9/15 Commission Meeting	A. The nonlead ban is not warranted due to lack of nonlead ammunition.	A. See Responses 1 and 18
20	Pamela Flick, Defenders of Wildlife	Testimony at 4/9/15 Commission Meeting	A. Supports the proposed regulations.	A. See Response 26
21	Ed Worley, National Rifle Association	Testimony at 4/9/15 Commission Meeting	A. Remains concerned that there is no mechanisms for certain calibers to be available in nonlead ammunition.	A. See Response 1, 12, and 14

Commenter Number	Commenter	Date	Summary of Comment	Response
22	Tom Pederson, California Rifle and Pistol Association	Testimony at 4/9/15 Commission Meeting	A. Concerned that the implementation lacks specific steps for a Director exemption process for a federal ban on armor piercing rounds and lack of an appeals process.	A. See Responses 12 and 14
23	Roman Porter, California Deer Association	Testimony at 4/9/15 Commission Meeting	A. Concerned about enforcement citations for hunters who accidentally stray on to poorly marked DFW lands. B. More guidance needs to be provided to enforcement.	A. See Response 13 B. See Response 13
24	Eric Mills, Action for Animals	Testimony at 4/9/15 Commission Meeting	A. Nonlead ban for waterfowl hunting did not stop hunters. B. Supports the proposed regulations and thanked the Department for their efforts. C. Also concerned about lead fishing gear.	A. True. The Commission acknowledges differences of opinion regarding the extent to which implementation will result in reduced hunting. See paragraphs 8, 9, and 14 of Response 11. B. See Response 26. C. This comment is beyond the scope of the current regulatory action, but see Response 22.
25	Kimberly Richards	Testimony at 4/9/15 Commission Meeting	A. Support the Department proposal for	A. See Response 26

Commenter Number	Commenter	Date	Summary of Comment	Response
			the nonlead ban.	
26	Bill Gaines, California Houndsman for Conservation	Testimony at 4/9/15 Commission Meeting	A. Supports the proposed regulations and thanked the Department for their efforts. B. Remains concerned about nonlead ammunition availability.	A. See Response 26 B. See Response 1
27	Mark Henley, California Waterfowl Association	Testimony at 4/9/15 Commission Meeting	A. Supports a Director exemption process for a federal ban on armor piercing rounds. B. Concerned about overlap in type C areas violations.	A. See Responses 12 and 14 B. See Response 13
28	Al Gearhart	Testimony at 4/9/15 Commission Meeting	A. These are anti-hunting regulations. B. He has never seen a bullet inside the deer he has harvest. C. Concerned about high cost of nonlead ammunition. D. No option for black powder hunters.	A. See Response 18 B. See Responses 3, 4, and 5 C. See Response 3 D. See Response 1
29	Kathy Lynch, National Shooting Sports Foundation, California Trappers Association, Safari Club International, Outdoor Sportman's Coalition, & Lynch and Associates	Testimony at 4/9/15 Commission Meeting	A. Remains concerned about nonlead ammunition availability. B. Ammo manufacturers are not going to meet the demand from Californians for nonlead ammunition. C. Ammo cost will	A. See Response 1 B. See Response 1 C. See Response 3

Commenter Number	Commenter	Date	Summary of Comment	Response
			increase. D. Concerned about Department certification process.	D. See Responses 12 and 13