Comments submitted by Elaine F. Leslie. (Full version vs the comments as read at the Council meeting on December 19, 2022.)

Thank you to the Council for seeking public comment on this important issue and for allowing the full version in a written submission.

As a recently retired Chief of Biological Resources for the National Park Service (NPS), my familiarity with the issue of lead impacts to wildlife is extensive-beginning with those impacts to the health and welfare of the California condors in the restoration program in the greater Grand Canyon Ecosystem, and more recently, their restoration in Redwood National and State Parks in collaboration with the Yurok Tribe in California. Many of us from multiple agencies and organizations have had hands-on experience with these highly-valued birds suffering and dying from the ingestion of lead. In addition, our collaborative work on eagles along the Chesapeake Bay and in the upper Midwest, enhanced our collective understanding that this is a national and multi-species problem. We know the impacts because these are intensely monitored species. It is likely a far-wider ranging issue than we can even imagine throughout wildlife populations, including mammals.

And while we endeavor to keep common species common, we very much need to address, through more research and analysis, the effects on at-risk species. Those species that are carrion feeders and at-risk species such as grizzly bears or Canada lynx, are subject to lead poisoning due to lead exposure. Many species are subject to lead poisoning from scavenging on wildlife species considered "varmints", from "plinking", such as prairie dogs. We likely do not see the immediate effects on these species because most are not monitored. Those that are, such as lynx or grizzly, are not necessarily monitored for lead poisoning or the compounded effects-we don't know if these animals have issues that may contribute to running in front of a car, or such as an eagle hitting power lines. More blood work and analysis should be funded for in depth evaluations-whether in the field during collaring and health check events or at rehab centers.

One argument we hear frequently from those in opposition to the restriction of lead ammunition and fishing tackle is that there are no population-level effects. We know this to be untrue-especially looking at species such as the condor, loons, swans and others. And it should be noted that population-level impacts are not the only important metric for wanting to get rid of lead toxicosis in wildlife.

The public now has a much better understanding that lead exposure is a significant public health concern due to its persistence in the environment. And many of these places are where we work and where we recreate-and in public lands of refuges and parks. We know that lead poisoning can affect children, especially in underserved communities globally, according to a study published by the United Nations Children's Fund (UNICEF) in 2020.

We are also concerned that children in underserved communities may be consuming wild game contaminated with lead or possibly even exposed during fishing activities. Since many communities not just recreate but rely on subsistence in Refuge and NPS units: from tribal members hunting in Alaska to underserved community members fishing in local park and refuge waters, their health is of utmost concern. All forms of lead are cumulative and toxic and lead needs to be eliminated from all products, especially when cost effective non-toxic alternatives exist.

And while this discussion focuses on actions that prohibits the use of lead ammunition in some units of the National Wildlife Refuge System, we believe that this needs to be an agency-wide phase out and complete ban. And we believe the use of lead ammunition or fishing tackle in the national parks also need

to be addressed and banned-all of the arguments regarding negative impacts of lead in the refuge system certainly also apply to the nation's national park units where these activities are authorized.

The request here is for serious consideration by the Office of the Secretary of the Interior and the Directors of the US Fish and Wildlife and the National Park Service to voluntarily implement an agencywide ban on the use of lead ammunition where hunting is authorized, as well as a ban on the use and sale of lead fishing tackle in all refuges and national park units where fishing is authorized. I am not suggesting here that this ban be immediately extended to the Bureau of Land (BLM) Management at this time. There is more hunting that occurs on BLM lands than any other properties in the Department of the Interior. But a comprehensive data analysis should be undertaken to assess exactly how much hunting occurs on NPS and USFWS properties vs BLM lands. And then an eventual phase-out of lead should be implemented on BLM lands as well so that the DOI is a leader in healthy lands and water initiatives.

In the national park system, a ban would also expand what is already in place and successful in our crown jewel parks such as Yellowstone, Glacier, and Grand Tetons. Do the rest of our nation's parks and refuges and the "wild life therein" not deserve the same level of protections?

It is time for the most protected lands and waters in America (and the world) to fulfill their conservation mission-one that public and the world expects of these agencies as world conservation leaders. The Biden-Harris administration, by launching America the Beautiful, challenges us all to implement a nationwide effort to conserve, connect, and restore. This lead ban can significantly contribute to this worthwhile endeavor.

As a measure of our conservation heritage, and respect for the land and our shared air, earth and water, it is more and more important to prevent known toxic materials from entering the environment. With a growing human population and more and more threats to wildlife and natural systems, we are obligated to pursue greener alternatives and learn to live more lightly on the earth. This is an issue we can all tackle with little or no hardship.

Protection and restoration of our national parks and refuges will ensure the long-term conservation of our national natural heritage for this, and future generations to come. This can be an enduring legacy for the Biden-Harris Administration and for the Department of the Interior.

Thank you for your time. Elaine F. Leslie, PhD