Dangers of PFAS and Microplastics

PFAS can be present in our water, soil, air, and food as well as in materials found in our homes or workplaces. One common characteristic of concern of PFAS is that many break down very slowly and can build up in people, animals, and the environment over time.

Due to their widespread production and use, as well as their ability to move and persist in the environment, surveys conducted by the Centers for Disease Control and Prevention (CDC) show that most people in the United States have been exposed to some PFAS. Most known exposures are relatively low, but some can be high, particularly when people are exposed to a concentrated source over long periods of time. Some PFAS chemicals can accumulate in the body over time.

Current peer-reviewed scientific studies have shown that exposure to certain levels of PFAS may lead to:

- Reproductive effects such as decreased fertility or increased high blood pressure in pregnant women.
- Developmental effects or delays in children, including low birth weight, accelerated puberty, bone variations, or behavioral changes.
- Increased risk of some cancers, including prostate, kidney, and testicular cancers.
- Reduced ability of the body's immune system to fight infections, including reduced vaccine response.
- Interference with the body's natural hormones.
- Increased cholesterol levels and/or risk of obesity.

Microplastics are fragments of any type of plastic less than 5 millimeters in length. They cause pollution by entering natural ecosystems from a variety of sources, including cosmetics, clothing, food packaging, and industrial processes. Microplastics are recognized to persist in the environment at high levels, particularly in aquatic and marine ecosystems, where they cause water pollution. However, microplastics also accumulate in the air and terrestrial ecosystems.

Because plastics degrade slowly (often over hundreds of thousands of years), microplastics have a high probability of ingestion, incorporation into, and accumulation in the bodies and tissues of many organisms. Microplastics have also been found in human blood, though their effects are largely unknown.

The intent of the resolution is to recognize the dangers to human health and the environment presented by perand polyfluoroalkyl substances (PFAS & PFOS), also known as "forever chemicals," and support actions by state and federal regulatory authorities to classify such chemicals as hazardous. Additionally, the resolution supports increased education and research on the effects of microplastics on the environment and human health, as well as development of alternative materials to replace plastics.

Therefore, be it resolved that the Izaak Walton League of America, assembled in convention in Lincoln, Nebraska July 29, 2023 amends its Conservation Policies, Chapter II Environmental Health by adding the following new provision to G) Hazardous and Toxic Substances 1):

1) To prevent any immediate or cumulative damage to human health or the environment by any of the thousands of new chemical substances fabricated every year, state and federal agencies should:

i) Identify and specifically categorize PFAS and PFOS (per- and polyfluoroalkyl substances) as general classification of chemicals that contaminate the waters and land across our country and threaten the health of

people, communities, and wildlife and educate the public to the concerns and impacts of PFAS and PFOS chemicals to them and their communities.

Be it further resolved that the Izaak Walton League of America amends its Conservation Policies, Chapter II Environmental Health by adding the following new provision to M) Plastics:

M) Plastics

3)

The League supports:

- Establishment of programs to educate the public on plastics and microplastics problems and impacts on their lives and health.
- Increased research into identifying and reducing health impacts of plastics in our environment, particularly in our water and food.
- Development of alternative materials to reduce or replace plastic.