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Testimony
Before the United States House of Representatives
Committee on Government Reform

Hearing on:
Ova-Pollution in the Potomac: Egg-Bearing Male Bass and Implications for Human and
Ecological Health

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Ova-Pollution in the Potomac: Egg-Bearing Male Bass and Implications for
Human and Ecological Health, October 4, 2006

Mr. Chairman and Members of the Committee:

On behalf of Potomac Riverkeeper, Inc., where I serve as Executive Director and Riverkeeper, thank you for the opportunity to present this statement to the Committee. Potomac Riverkeeper's mission is to protect and restore water quality in the Potomac River, from its headwaters in West Virginia to the Chesapeake Bay, through citizen action, education and enforcement. We serve the millions of citizens living in the Potomac watershed and surrounding Chesapeake Bay community who rely on the river for everything from drinking water to recreation.

Potomac Riverkeeper has been actively following the problem of fish intersex—the condition in which hermaphroditic qualities emerge—since it was first uncovered in our watershed by the US Geological Survey in 2003. At that time, scientists were trying to determine the cause of a fish kill 230 miles upstream from Washington, DC when they discovered ovaries in fish testes. Potomac Riverkeeper played an instrumental role in educating the public about the problem by providing information to the *Washington Post's* front page story on intersex fish in October, 2004. Other stories followed, but because the problem was distant from the Washington, DC area, and because the focus was on fish health and not human health, public interest and EPA action lagged. Two years later, the intersex issue is front page news again—more so than when scientists first learned of the condition.

Intersex fish are now turning up in the Potomac waters of our metropolitan area, renewing the conversation about what is causing such mutations and giving rise to a new question: “How does this affect the millions of people living in the watershed?” Although water treatment facilities do a good job filtering the metropolitan area's tap water according to the EPA's standards, pollutants not tested for by water treatment plants do exist in the river.



According to the *Post's* article, a 2002 test of the water in the Potomac yielded low levels of caffeine, an insecticide (DEET), and a chemical produced when the body breaks down nicotine, none of which is tested regularly by water treatment plants.

Over the last three years, endocrine disrupting chemicals (EDCs) have been linked with the intersex condition, though an exact EDC has not been named. EDCs attack the endocrine systems of fish, usually during the larval stage, and turn on hormonal processes that are not usually turned on for male fish. In the Potomac, male smallmouth and largemouth bass are growing ovaries on their testes. Studies show that EDCs affect sexual development and behavior, and reduce fertility.

While most scientists are unready to say which EDCs are responsible for intersex fish, the need to identify them is not new. The National Oceanic and Atmospheric Association (NOAA) concluded in a June 2002 report that “overt reproductive endocrine disruption in fish does not appear to be a ubiquitous environmental phenomenon. Rather, it appears to be associated with higher levels of contamination near pollution sources such as sewage treatment plants and industrial plants.” In 1996, Congress created an EPA office dedicated to researching EDCs. The Endocrine Disruptor Research initiative was mostly a grant-based office, giving away about 2/3 of its \$5 million budget. Ten years after its creation, the office has yet to release significant information about which EDCs are responsible for intersex—or what the risk is to metropolitan drinking water.

A variety of sources emit potential EDCs into the river. Antibiotics that are excreted or otherwise flushed down toilets do not get filtered before leaving treatment centers. Hormones from chicken waste make their way into water at poultry farms in Virginia and West Virginia. Stormwater runoff (which contains everything from pesticides and fertilizers to perfume and cosmetics) enters the water completely untreated, as does raw sewage from combined sewer overflows (CSOs). The issue at stake is the disposal of hazardous material and potentially hazardous material in a responsible fashion—we need to actualize the goals of the Clean Water Act and stop dumping waste, medications, and chemical runoff into the river. We are already over twenty years behind the Clean Water Act's stated goal.

Regarding human health, if scientists have not yet determined what pollutant is causing a reproductive health problem in fish in the Potomac, how can anyone say it is not in our drinking water? How can anyone say humans will not face a similar health problem? At best, all anyone can say is that they do not know if the EDC effect on fish would affect humans. One cannot deny that there is a potential threat to the millions of people who recreate, fish, and draw their tap water from the Potomac River. We know there are reproductive problems happening to the fish, and these affected fish are analogous to the canary in the coal mine. The fish are our warning.

Potomac Riverkeeper, Inc., on behalf of all citizens living in the watershed, is here today to ask that Congress, in cooperation with organizations like mine and the entire scientific community, proactively work to save Our Nation's River. With over five million people in the Potomac watershed, with Washington, DC being a destination for millions of tourists, and with members of Congress and their families living here much of the year, it makes sense to focus on the health

of this river. The banks of the Potomac, and its tributaries, are home to much less industry than most other major rivers in America. To believe we cannot stop these pollutants from entering our water and therefore eradicate the intersex problem is to sound the death knell of the Clean Water Act. By working together, we can make the Potomac a model river—paving the way for cities and states around the nation to clean up their water supply. With the full support and cooperation of the US Government and its agencies, we can have a fishable, swimmable Potomac, with plenty of clean, safe drinking water for all.

Thank you again for hearing my testimony today and I look forward to working with the committee in the future.

Ed Merrifield
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