

**EVS Environmental Consultants Inc. *Human Health Risk Assessment of Chemical Contaminants in Four Fish Species From the Middle Willamette River, Oregon.* Portland: Oregon Department of Environmental Quality, 21 Nov. 2000.** (reviewed by Jessica Miller)

In 1998 the Oregon Department of Environmental Quality established a Willamette River Human Health committee with representatives from numerous human and environmental health groups. With the goal of researching the human health effects of eating fish from the Willamette River, yet with limited funding, the WRHH focused on the 45-mile WFWF reach (Wheatland Ferry to Willamette Falls).

Human Health Risk Assessment of Chemical Contaminants in Four Fish Species From the Middle Willamette River, Oregon was prepared in November 2000 by EVS Environmental Consultants, Inc. for the Oregon Department of Environmental Quality. This 127-page report covers hazard identification, dose-response assessment, exposure assessment, and risk characterization.

Human health risks were assessed for three populations: general public, recreational anglers, and subsistence anglers. Each group was then evaluated in subcategories: adults (18+ years), women of childbearing age (15-44), and children (14- years). The report also explains the calculations for the ingestion amounts used in estimated risks associated with fish consumption.

The four fish researched for this report are bass, carp, pikeminnow, and sucker. Specifically applicable to the study of human health effects is the examination of the chemicals found within these fish and the health hazards associated with ingestion of such toxicities. The “risk characterization” section of this report summarizes the information into noncarcinogenic health effects and carcinogenic risk estimates.

## **Critique**

Human Health Risk Assessment of Chemical Contaminants in Four Fish Species From the Middle Willamette River, Oregon although overwhelming in size, is an accurate and relatively easy to understand source about human health effects of the Willamette River. The section of the report that is most applicable to human health is the “Executive Summary” on pages ES1-4 and the “Risk Characterization” section on pages 40-75.

Through examining toxic chemicals found in fish within the Willamette River and analyzing human health effects of such toxics when ingested, the report concludes that most levels of hazard are small enough to be ignored. However, the report does highlight a few hazards that may be more harmful.

Overall, this source is great for someone who is looking for rather specific information on one of the four fish studied and/or chemicals studied. However, this source is too large and technical for someone who is hoping to get a general idea of the human health effects involved with eating the fish from this river.

<http://www.deq.state.or.us/wq/willamette/WQStudies/HHRAreport.pdf> (11 Apr. 2004)

[return to info sources page](#)

[return to home page](#)