



Information about the Advisory for Eating Fish from Silverwood Lake

Office of Environmental Health Hazard Assessment (OEHHA)
California Environmental Protection Agency

August 2013

1) Q: Why was testing of chemicals in fish done at Silverwood Lake?

- In the statewide Lakes Survey conducted by the State Water Resources Control Board, high mercury and PCB levels were found in largemouth bass from this lake.
- The Lahontan Region Water Quality Control Board (Regional Board 6) secured funding to collect and test more bass and several other fish species that people catch and consume from the lake. The data were provided to the Office of Environmental Health Hazard Assessment (OEHHA) to develop consumption guidelines for people eating fish from this lake.

2) Q: Which fish were tested in sufficient samples for developing advice?

- Largemouth bass, bluegill, channel catfish, striped bass, tule perch, and rainbow trout. Blackfish and tui chub samples were combined.

3) Q: What chemicals were found in the fish tested?

- All species were tested for mercury and polychlorinated biphenyls (PCBs). Some species were tested for pesticides (chlordanes, DDTs, dieldrin).
- Mercury and PCBs were the only chemicals detected at levels of health concern. The sources of these chemicals in the lake are not known

4) Q: What are the health concerns from eating fish with these chemicals?

- Mercury—in the form methylmercury— can harm the brain and nervous system of people, especially unborn babies and children.
- PCBs affect many body functions resulting in a variety of health problems, including effects on the nervous system. PCBs have been found to cause cancer in animal studies.

5) Q: How was the consumption advice in the advisory determined?

- OEHHA evaluated the toxicity of the chemicals and developed Advisory Tissue Levels (ATLs) as a starting point in the advisory process to develop consumption advice.
- OEHHA developed Advisory Tissue Levels (ATLs) based on chemical toxicity and compared chemical levels in fish from Silverwood Lake to the ATLs.
- OEHHA's ATLs, advisories, and consumption guidelines balance the risks and benefits of fish consumption. Multiple ATLs are developed for each chemical corresponding to the number of servings of fish that can be eaten in a week.
- Consumption advice is developed for two groups in the population.

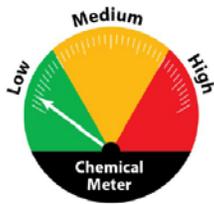
6) Q: What does OEHHA recommend for people who want to eat fish from Silverwood Lake?

- For women 18 to 45 years old and children 1 to 17 years old,
 - Do not eat largemouth bass, bluegill, catfish, blackfish, tui chub, and striped bass.
 - Can eat one serving per week of tule perch, *or*
 - Can eat rainbow trout daily.
- For women over 45 years old and men
 - Do not eat blackfish, tui chub, and striped bass.
 - Can eat one serving per week of largemouth bass, bluegill, catfish, or tule perch, *or*
 - Can eat rainbow trout daily.

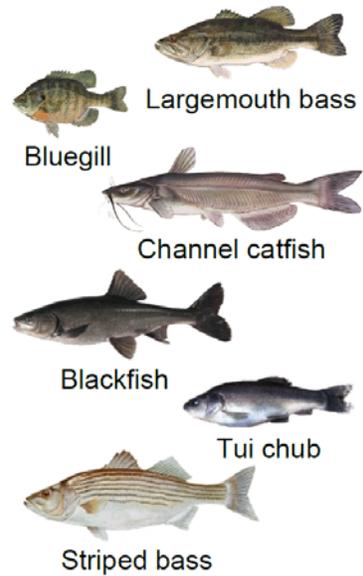
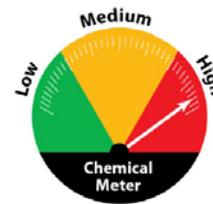
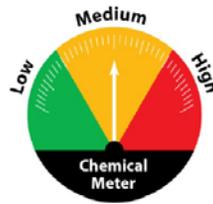
7) Q: Where can I get more information on the guidelines for Silverwood Lake?

- Call OEHHA at (916) 323-7319 or (510) 622-3170, or visit www.oehha.ca.gov (click on "FISH")
- Freshwater or Ocean Sport Fishing Regulations booklets from the Department of Fish and Wildlife, or www.dfg.ca.gov/regulations

A Healthy Guide to Eating Fish from Silverwood Lake



= High in Omega-3s



7 servings a week



1 serving a week

Do not eat
except women over 45 years
and men can eat largemouth
bass, bluegill, or catfish—
1 serving a week

Eat only the skinless fillet.
PCBs are in the fat and skin
of the fish.



- Remove and throw away the skin before cooking.
- Cook thoroughly and allow the juices to drain away.

What is a serving?



For Adults For Children

The recommended serving is the size and thickness of your hand. Give children smaller servings.

Why eat fish?

Eating fish is good for your health. Fish have Omega-3s that can reduce your risk for heart disease and improve how the brain develops in unborn babies and children.

What is the concern?

Some fish have high levels of mercury and PCBs. PCBs can cause cancer. Mercury can harm the brain, especially in unborn babies and children.