



INFORMATION ABOUT EATING FISH FROM SQUAW LAKE (IMPERIAL COUNTY)

Office of Environmental Health Hazard Assessment (OEHHA)
California Environmental Protection Agency
February 2019

Why did OEHHA develop an advisory for eating fish from Squaw Lake?

OEHHA developed an advisory for Squaw Lake because of mercury, PCBs, and selenium found in the fish caught from this water body. Squaw Lake is located near Winterhaven, CA, just above the Imperial Dam on the Colorado River, in Imperial County. This advisory is part of an ongoing effort by OEHHA to provide safe-eating advice for fish in different California water bodies.

Why should I eat fish?

- Low-contaminant fish are an important part of a healthy, well-balanced diet. The American Heart Association recommends eating at least two servings of fish each week.
- Fish are a good source of protein and vitamins, and are a primary dietary source of heart-healthy omega-3 fatty acids. Eating low-contaminant fish while pregnant may help the baby's brain develop.

Which chemicals are of concern for people eating fish from Squaw Lake?

- Mercury
 - Mercury is a metal that comes from natural sources, mining, and air fallout from burning coal and other fuels. It is the most commonly found contaminant in fish.
 - Too much methylmercury, the form of mercury found in fish, can harm the brain, especially in fetuses, babies, and children. Mothers can pass methylmercury to their babies during pregnancy.
 - Because fetuses, babies, and children are especially sensitive to mercury, OEHHA has one set of advice for the amount of mercury-containing fish that women age 18-49 years and children should eat, and another set of advice for women 50 years and older and men 18 years and older.
- Polychlorinated Biphenyls (PCBs)
 - PCBs are industrial chemicals. While banned in the 1970s, they persist for many years in the environment and are still found in the air and water from spills, leaks, and improper disposal.
 - High levels of PCBs can cause health problems. Some forms of PCBs caused cancer in animal studies.

- PCBs can build up to very high levels in the skin, fat, and some internal organs of fish. That is why OEHHA recommends eating only skinless fillet (meat) of fish.
- Selenium
 - Selenium is a metalloid that comes from natural sources and is an essential nutrient.
 - High levels of selenium can cause health problems including hair loss, gastrointestinal distress, dizziness and tremors.

How did OEHHA determine the consumption guidelines for fish from Squaw Lake?

- OEHHA compared chemical levels in fish caught from Squaw Lake to levels that are considered safe for human consumption.
- OEHHA's consumption guidelines balance the risks and benefits of fish consumption.

What does OEHHA recommend for people who want to eat fish from Squaw Lake?

- OEHHA recommends the amounts and types of fish that may be eaten each week as "servings." A serving is about the size and thickness of your hand for fish fillets. Give children smaller servings. For smaller fish species, several individual fish may be required to yield a serving.
- Women 18-49 years and children 1-17 years may eat:
 - 2 total servings per week of Striped Bass, or
 - 3 total servings per week of black bass species or sunfish species, or
 - 4 total servings per week of Channel Catfish, Common Carp, or Flathead Catfish
- Women 50 years and older and men age 18 years and older may eat:
 - 3 total servings per week of black bass species, Striped Bass or sunfish species, or
 - 4 total servings per week of Channel Catfish or Common Carp, or
 - 5 total servings per week of Flathead Catfish, or
- For additional fish species found in Squaw Lake and not included in this advisory, OEHHA recommends following the [statewide advisory for eating fish from California's lakes and reservoirs without site-specific advice](#)

What else can I do to protect my health and the health of my family?

- Eat a variety of fish.
- Eat smaller (younger) fish of legal size.

- Eat only the skinless fillet or meat portion of fish.
- Thoroughly cook the fish, allow the juice to drain away.
- Learn about OEHHA's guidelines for eating sport fish in California:
 - Visit <https://oehha.ca.gov/fish/advisories>, or call OEHHA at (916) 324-7572 or (510) 622-3170
 - Check the Freshwater or Ocean Sport Fishing Regulations booklets from the California Department of Fish and Wildlife, or visit <https://www.wildlife.ca.gov/Regulations>



Women
(18-49 Years)

Children
(1-17 Years)



Women
(50+ Years)

Men
(18+ Years)

4 TOTAL
SERVINGS
A WEEK

OR

4 TOTAL
SERVINGS
A WEEK

OR

3 TOTAL
SERVINGS
A WEEK

OR

2 TOTAL
SERVINGS
A WEEK

5 TOTAL
SERVINGS
A WEEK

OR

4 TOTAL
SERVINGS
A WEEK

OR

3 TOTAL
SERVINGS
A WEEK

OR

3 TOTAL
SERVINGS
A WEEK

Serving Size
A serving of fish is about the size and thickness of your hand. Give children smaller servings.

For Adults



For Children



A GUIDE TO EATING FISH from SQUAW LAKE (IMPERIAL COUNTY)

Eat the Good Fish

Eating fish that are low in chemicals may provide health benefits to children and adults.



Avoid the Bad Fish

Eating fish with higher levels of chemicals like mercury or PCBs may cause health problems in children and adults.



Choose the Right Fish

Chemicals may be more harmful to unborn babies and children.



Flathead Catfish



Channel Catfish



Common Carp



Black Bass Species
♥ high in omega-3s



Sunfish Species



Striped Bass
♥ high in omega-3s



California Office of Environmental
Health Hazard Assessment

web www.oehha.ca.gov/fish
email fish@oehha.ca.gov
phone (916) 324-7572

Eat only the
skinless fillet



Eat only the meat



Some chemicals are higher in the skin, fat, and guts.