



## **INFORMATION ABOUT EATING FISH FROM THE LOWER FEATHER RIVER INCLUDING DIVERSION POOL BELOW LAKE OROVILLE**

Office of Environmental Health Hazard Assessment (OEHHA)  
California Environmental Protection Agency  
September 2014 Update

### **Why did OEHHA develop the advisory for eating fish from the Lower Feather River?**

The Office of Environmental Health Hazard Assessment (OEHHA) evaluated current information and provided advice for the Lower Feather River in 2006, 2009 and 2012. This 2014 final report consolidates information from the previous evaluations, adds the advice for anadromous species, evaluates new data, and expands the advice site to include the Diversion Pool. Anadromous fish live in the ocean but swim up rivers to spawn in fresh water, including the Feather River. The advisory is based on findings of mercury and PCBs in fish. The Lower Feather River receives water from Lake Oroville, the Diversion Pool, as well as Thermalito Forebay and Thermalito Afterbay. This advisory is part of OEHHA's evaluation of the water bodies associated with the Feather River watershed. Advisories have also been developed for the Upper Feather River, Lake Oroville, Thermalito Forebay, and Thermalito Afterbay.

### **Why should I eat fish?**

- Fish is an important part of a healthy, well-balanced diet. The American Heart Association recommends eating at least two servings of fish each week.
- Fish provides a good source of protein, vitamins, and heart-healthy omega-3 fatty acids. It is important for pregnant women to eat fish because omega-3 fatty acids help the baby's brain develop.

### **How does mercury get into fish?**

- The Feather River watershed contains many gold mining sites where mercury was used to extract the gold.
- When mercury in the water gets into the mud, it is changed by bacteria to the more toxic form, methylmercury, which is taken up by aquatic plants and animals.
- Methylmercury then gets passed up the food chain from plants and animals to larger, older fish, where it builds up in the fish tissue.

### **What are the health concerns from eating fish with mercury?**

- Methylmercury can harm the brain and nervous system of people.

- Unborn babies and children are more sensitive to the toxic effects of methylmercury. Thus, women who might become pregnant (typically 18 to 45 years of age) and children (1 to 17 years) are the sensitive population.
- Women over 45 years and men have lower risk and can eat more fish.

### **How do the mercury levels for fish from the Lower Feather River compare to nearby water bodies?**

- Carp and sunfish had moderate mercury levels. These fish can be eaten at least once a week.
  - Carp mercury levels were also moderate from Lake Oroville, Thermalito Forebay, and Thermalito Afterbay.
  - Sunfish mercury levels were low from Lake Oroville, Thermalito Forebay and Thermalito Afterbay.
- Bass, catfish, and pikeminnow had high mercury levels. These fish should not be eaten by the sensitive population.
  - Bass and catfish mercury levels were also high in Lake Oroville.
  - Pikeminnow mercury levels were also high in the fish from the Upper Feather River, Thermalito Forebay and Thermalito Afterbay.
  - The advice for catfish was based on mercury and PCBs.

### **How did OEHHA determine the guidelines for fish from the Lower Feather River?**

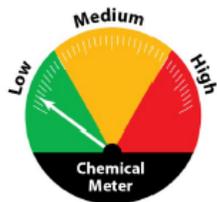
- OEHHA compared chemical levels in fish from this river to acceptable levels of human exposure.
- OEHHA's advice balances the risks and benefits of eating fish.

### **What else can I do to protect my health and my family's?**

- Eat a variety of fish, especially those low in chemicals and high in omega-3s.
- Eat smaller (younger) fish of legal size.
- Eat only the skinless fillet or meat portion of fish you catch.
- Thoroughly cook the fish, allow the juice to drain away.
- Learn about OEHHA's guidelines for eating sport fish in California:
  - Visit [www.oehha.ca.gov](http://www.oehha.ca.gov) (click on "FISH", then "Fish Advisories"), or call OEHHA at (916) 323-7319 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>

# A Healthy Guide to Eating Fish from the Lower Feather River including the Diversion Pool

## Women 18-45 years and children 1-17 years

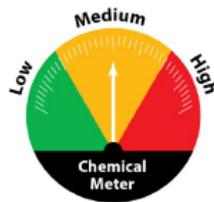


American shad ♥

Chinook king salmon ♥

Steelhead ♥

♥ = high in omega-3s

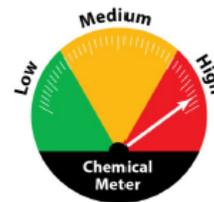


Carp

Hardhead

Sunfish

Sucker



Black bass

Catfish

Pikeminnow

Striped bass

Sturgeon

2-3 servings a week



1 serving a week

Do not eat

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?

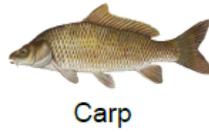
Some fish have high levels of mercury and PCBs. Mercury can harm the brain, especially in unborn babies and children. PCBs can also harm the brain and cause cancer.

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## Women over 45 years and Men



♥ = high in omega-3s



7 servings a week

OR

2 servings a week OR  
3 servings of sunfish

OR

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?



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

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