



## **INFORMATION ABOUT EATING FISH FROM THERMALITO FOREBAY AND AFTERBAY**

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

### **Why did OEHHA develop the advisory for eating fish from Thermalito Forebay and Thermalito Afterbay?**

The Office of Environmental Health Hazard Assessment (OEHHA) developed the advisory for Thermalito Forebay and Thermalito Afterbay based on findings of mercury and PCBs in fish. These water bodies receive water from Lake Oroville, which is part of the Feather River watershed. They also provide water for irrigation and recreational activities. This advisory is part of OEHHA's evaluation of the water bodies associated with the watershed. Advisories have also been developed for Lake Oroville, Lower Feather River, and Upper Feather River.

### **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 mercury levels in fish from Thermalito Forebay and Thermalito Afterbay compare to nearby water bodies?**

- The sunfish had low mercury levels, even lower than those from Lake Oroville and the Lower Feather River. Sunfish can be eaten at least twice a week.
- The black bass and carp from Thermalito Forebay and Thermalito Afterbay had moderate mercury levels, which are lower than those from Lake Oroville and the Lower Feather River. Black bass can be eaten at least once a week. The advice for carp was more restrictive because it was based on mercury and PCBs.
- Pikeminnow had a high mercury level, similar to that for pikeminnow from the Lower and Upper Feather River. It should not be eaten by the sensitive population.

### **How did OEHHA determine the guidelines for fish from Thermalito Forebay and Thermalito Afterbay?**

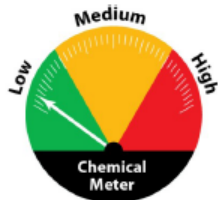
- OEHHA compared chemical levels in fish and crayfish from these water bodies to acceptable levels of human exposure.
- OEHHA's advice balances the risks and benefits of eating fish.

### **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 Thermalito Forebay and Thermalito Afterbay

Women 18-45 years and children 1-17 years



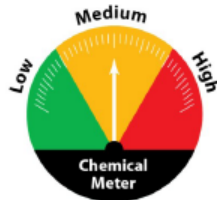
Bluegill




Redear sunfish

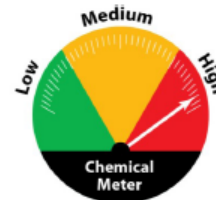


Crayfish



Black bass 

 = High in Omega-3s



Carp



Pikeminnow

Sunfish—2 servings a week  
OR  
Crayfish—7 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. PCBs can cause cancer. Mercury can harm the brain, especially in unborn babies and children.

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Women over 45 years and men can safely eat more fish



Black bass



Bluegill



Crayfish



Redear sunfish



Carp



Pikeminnow

= High in Omega-3s

7 servings a week  
**EXCEPT** bass—2 servings  
a week



1 serving a week

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