

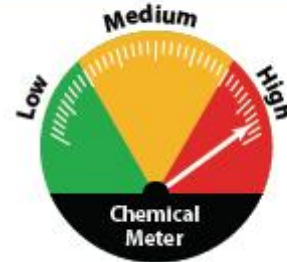
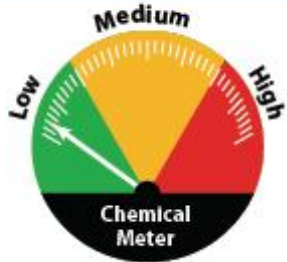
Recent Activities/Future Plans: Monitoring Data Needs

Margy Gassel, Ph.D.
Office of Environmental Health Hazard Assessment
RMP Sport Fish Workgroup Meeting
July 10, 2012

Updated SF Bay Advisory May 2011

Men over 17 and women over 45

Guide to Eating Fish and Shellfish from San Francisco Bay



♥ = High in Omega-3s

Safe to eat
2 servings per week

OR

Safe to eat
1 serving per week

Do not eat
AND

Do not eat any fish from the
Lauritzen Channel in
Richmond Inner Harbor



Brown rockfish OR red rock crab —
5 servings per week OR
Salmon — 7 servings per week

Women 18 - 45 and children 1 - 17



Brown rockfish



Red rock crab

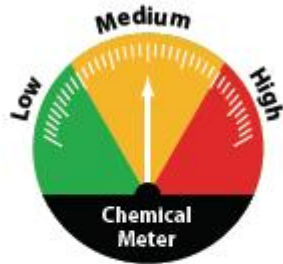


Jacksmelt



Chinook (king) salmon ♡

♡ = High in Omega-3s



California halibut



White croaker



Surfperches



Striped Bass



Sharks



White sturgeon

Jacksmelt photo: Kirk Lombard; California Halibut: John Shelton



- Eat only the skinless fillet. PCBs are in the fat and skin of the fish.
- Always remove and throw away the skin of white croaker before cooking.
- Cook thoroughly and allow the juices to drain away.
- For crab, eat only the meat.

What is a serving?



For Adults For Children

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

What is the concern?

Some fish have high levels of PCBs and mercury. PCBs might cause cancer. Mercury can negatively affect how the brain develops in unborn babies and children. It is especially important for women who are pregnant or breastfeeding to follow these guidelines.

♡ 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.

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2 servings per week

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1 serving per week

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AND
Do not eat any fish from the
Lauritzen Channel in
Richmond Inner Harbor**

Anadromous species advisory

- February 2012
- American shad, Chinook (king) salmon, steelhead trout, striped bass, and white sturgeon caught in California rivers, estuaries, and coastal waters

SF Bay: Number of Fish or Shellfish Analyzed

Species	Mercury	PCBs
Shiner perch	902	1202
White croaker (skin on)	190	279
White croaker (skin off)	-	60
Striped bass	253	85
Jacksmelt (whole body)	95	95
Jacksmelt (fillet)	20	20
Leopard shark	76	54
Red rock crab (muscle)	60	60
Red rock crab (hepatopancreas)	60	60
Chinook (king) salmon	57 (15)	24 (15)
White sturgeon	43 (31)	43
Black perch	33	33
California halibut	32	23
Brown rockfish	30	30
Walleye surfperch	16	16
Brown smoothhound shark	9	9
Rubberlip seaperch	9	9
Barred surfperch	6	6

Surfperch Variability

Species Common Name	Mercury	PCBs
Black perch	118	8
Rubberlip seaperch	349	9
Barred surfperch	346	21
Walleye surfperch	155	59
Shiner perch	103	137
All surfperch	112	131

Additional species and numbers sampled

Species	Mercury	PCBs
Pacific sardine ^a	10	10
Pacific herring	12	12
Northern anchovy ^b	96	96
Bat ray	0	0
Pacific chub mackerel	0	0
Pacific staghorn sculpin	0	0
Starry flounder	0	0
Pacific sanddab	0	0
Monkeyface prickleback	0	0

^a one sample

^b immature

Bay oysters

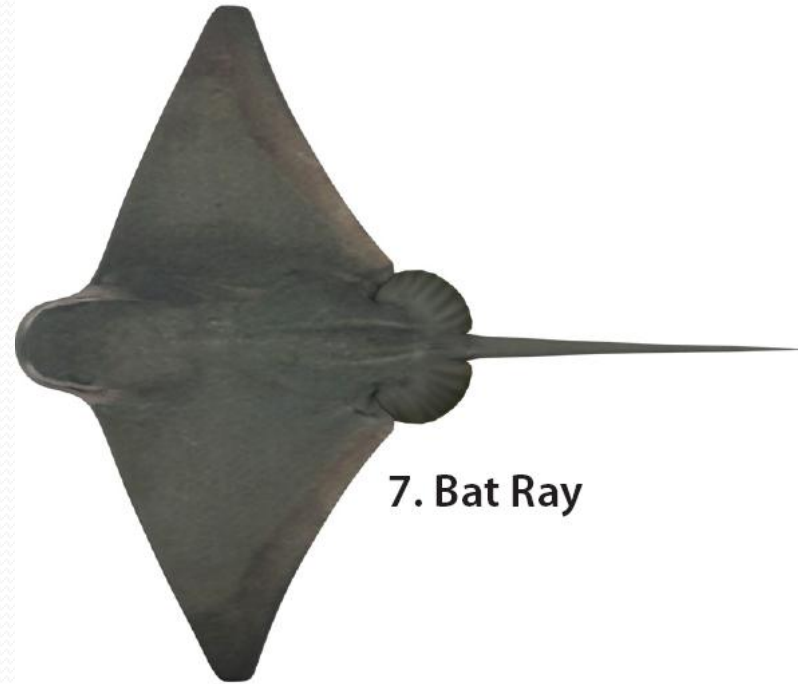
- The Watershed Project is building an oyster reef at Point Pinole
- Living Shoreline Initiative retrieving samples on July 16th



1. Starry Flounder



4. Pacific Sandab



7. Bat Ray



2. Pacific Herring



5. Pacific Sardine



3. Northern Anchovy



6. Pacific Staghorn Sculpin



8. Chub (Pacific) Mackerel