Contaminants in Bay Sport Fish, 2003

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2003 Report Released

CONTAMINANT CONCENTRATIONS IN FISH FROM SAN FRANCISCO BAY, 2003

Designed by Linda Wanczyk
2003 Sampling Locations
Fish Monitoring

- Began in 1994
- 7 species for trends analysis
- Legacy and emerging contaminants
- Why is there concern?
  - Human Health
  - Wildlife Health
Who Utilizes RMP Data?

- Water Board assessment of Bay Impairment

- OEHHA Consumption Advisories

- Department of Health Services - Risk Communication
Bay fish species consumed by anglers with recent fish consumption

Anglers reporting no consumption in last 4 weeks not included

From The San Francisco Bay Seafood Consumption Study—Public Summary
## Current Tissue Guidelines

<table>
<thead>
<tr>
<th></th>
<th>Aroclors ppb</th>
<th>Mercury ppm</th>
<th>DDT ppb</th>
<th>Chlordane ppb</th>
<th>Dieldrin ppb</th>
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</thead>
<tbody>
<tr>
<td>OEHHA Screening Value</td>
<td>20</td>
<td>0.3</td>
<td>100</td>
<td>30</td>
<td>2</td>
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<tr>
<td>Water Board TMDL</td>
<td>10</td>
<td>0.2</td>
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</tbody>
</table>
Striped Bass Mercury

Mean

Target
White Croaker PCBs

Mean

Target
2003 Results
Human Health

• All trends species < SV for chlordanes
• Only 1 sample > DDT SV
• 15% of trends species > dieldrin SV
• 69% of trends species > Hg TMDL Target
• 86% of trends species > PCB TMDL Target
PBDEs

PBDE Concentration (ng/g wet weight)

- California Halibut
- Jacksmelt
- Leopard Shark
- Shiner Surfperch
- Striped Bass
- White Croaker
- White Sturgeon

ND=2, ND=1, ND=7
PCBs, Lipid Weight
DDTs Lipid Weight

Leopard Shark

Striped Bass

Shiner Surfperch

White Croaker

Sum DDTs (ng/g lipid)
Chlordanes Lipid Weight

**Leopard Shark**
- 1994: A
- 1997: A
- 2000: B
- 2003: B

**Striped Bass**
- 1994: A
- 1997: B
- 2000: C
- 2003: C

**Shiner Surfperch**
- 1994: ND (n = 5)
- 1997: ND (n = 7)

**White Croaker**
- 1994: A
- 1997: B
- 2000: B
- 2003: C

*ns* indicates no significant difference.
Hg in Striped Bass
Trends Summary

• Evidence of decline in DDTs & Chlordanes in some fish species

• High variability in PCB data

• No long-term trend in striped bass Hg
2006 Fish Monitoring

- MLML currently sampling for 2006
- Coordinating with Region 2 TMDLs
- Continue to analyze PBDEs
For more information please take a copy of our 2003 report OR contact me at jennifer@sfei.org