

## Total Maximum Daily Load Progress Report

Regional Water Board	San Diego, Region 9
<b>Beneficial uses affected:</b>	COMM, BIOL, EST, WILD, RARE, MAR, MIGR, SHELL
<b>Pollutant(s) addressed:</b>	Polychlorinated biphenyls (PCBs)
<b>Implemented through:</b>	<a href="#">CAO</a> , <a href="#">WDRs</a>
<b>Approval date:</b>	May 13, 1998

## SAN DIEGO BAY REMEDIATION STRATEGY PCB Contaminated Sediment Cleanup

### STATUS

- Conditions Improving**
- Data Inconclusive
- Improvement Needed
- TMDL Achieved/Waterbody Delisted

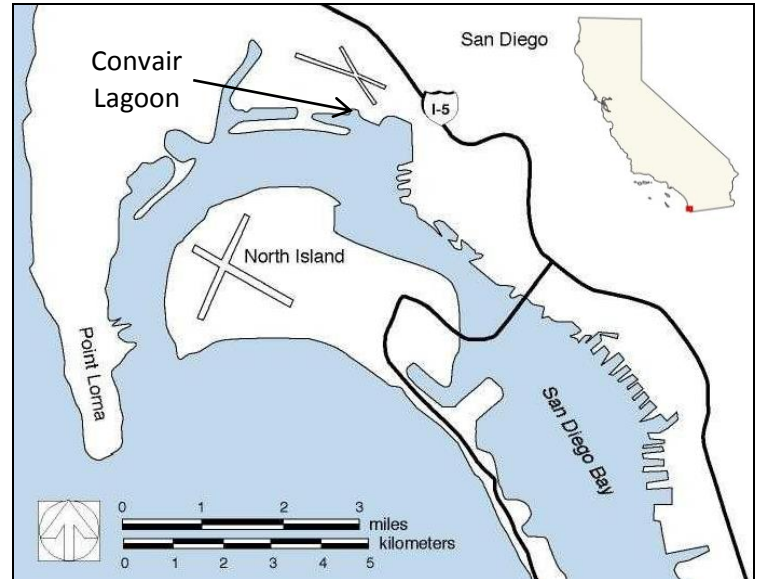
### Remediation Summary

The discovery and remediation of polychlorinated biphenyl (PCB) contaminated sediment in Convair Lagoon was one of the San Diego Regional Water Board's earliest major cleanup efforts in San Diego Bay. Although banned today, these man-made chemicals were once common in a variety of industrial products. PCBs are a known human carcinogen, can bioaccumulate up the food chain, and do not degrade.

In the early 1980s, the [California State Mussel Watch Program](#) found that mussels retrieved from the Convair Lagoon portion of San Diego Bay had PCB tissue concentrations of up to 3.79 mg/kg. These concentrations exceeded the U.S. Food and Drug Administration's (USDA's) limit of 2.0 mg/kg for human consumption and rendered shellfish from the Convair Lagoon portion of San Diego Bay no longer safe for human consumption. The San Diego Regional Water Board's follow-up investigation found high concentrations of the same types of PCBs in the storm drains that drain the former bayside Teledyne Ryan Aeronautical Facility (TRA) as were found in the Convair Lagoon mussels. PCB concentrations of up to 1,800 mg/kg were also measured in Convair Lagoon sediment.

In 1986, the Water Board issued [Cleanup and Abatement Order No. 86-92](#) directing TRA to clean up the contaminated sediment in Convair Lagoon, clean out the storm drains, and conduct long-term maintenance and monitoring. TRA proposed and constructed a seven acre submerged containment structure to isolate (cap) the PCB-bearing sediment and prevent the benthic burrowing organisms from further PCB exposure. TRA also cleaned its landside facility and storm drains. These actions abated the effects of historic PCB discharges into Convair Lagoon. However, the entirety of San Diego Bay remains on the 303(d) list as impaired for PCBs in fish tissue.

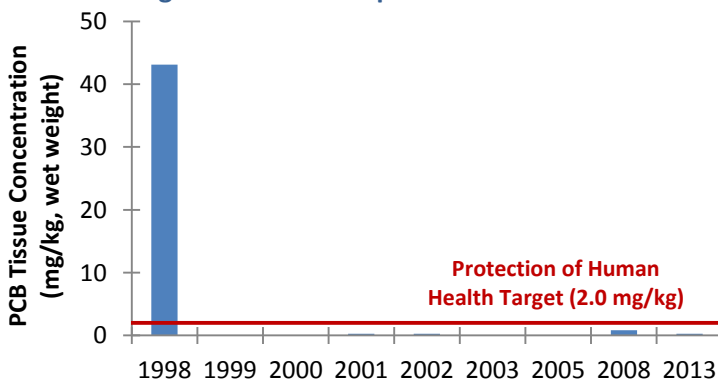
### Convair Lagoon, San Diego Bay



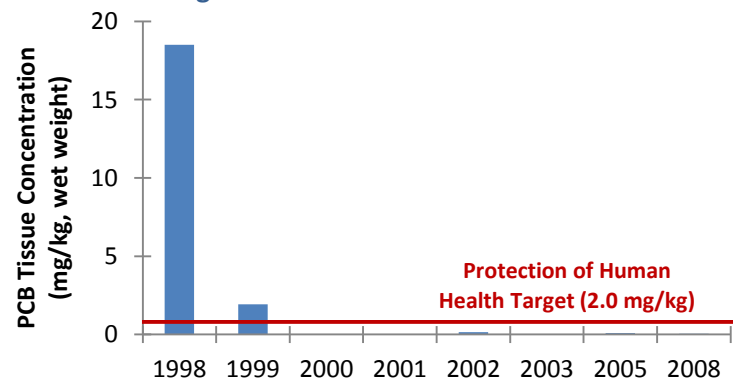
### Water Quality Outcomes

- As indicated by the tissue data, the submerged containment structure has effectively prevented the benthic community and other aquatic life from further exposure to the buried PCB-contaminated sediment in Convair Lagoon.
- On-going monitoring data show that PCB concentrations in ghost shrimp and sea snail tissue are below the USDA's limit for human consumption.

Convair Lagoon Ghost Shrimp PCB Tissue Concentration



Convair Lagoon Sea Snail PCB Tissue Concentration



Additional information on the cleanup action can be found on the [Convair Lagoon](#) and [TRA](#) GeoTracker pages.

Updated September 2013