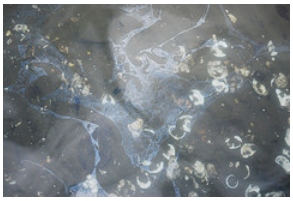
Toxic Contaminants Research

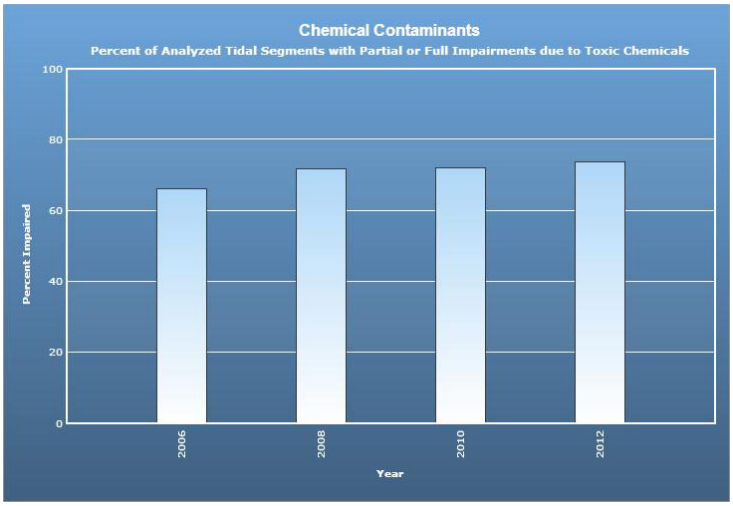
OUTCOME



Continually increase our understanding of the impacts and mitigation options for toxic contaminants. Develop a research agenda and further characterize the occurrence, concentrations, sources and effects of mercury, PCBs and other contaminants of emerging and widespread concern. In addition, identify which BMPs might provide multiple benefits of reducing nutrient and sediment pollution as well as toxic contaminants in waterways.

Why is this outcome important?

The toxic contaminants that are widely distributed in the Chesapeake Bay watershed harm the health of fish and wildlife and present risks to human health that limit the amount of fish that people can consume. Reducing the impacts of toxic contaminants is critical to improving the health of living resources and improving their recreational value for the public. Because the public wants safe water and edible fish, outcomes related to toxic contaminants are included in the new agreement.



See how toxic contaminants are doing at chesapeakebay.net

Current Conditions:

In 2012, close to 74 percent of the tidal water segments of the Chesapeake Bay were either fully or partially impaired due to toxic contaminants, up from 66 percent in 2006.

Federal agencies released a report in 2013 that indicates that there are 10 different groups of toxic contaminants in the Bay watershed. In addition to causing fish consumption advisories in the Bay, toxic contaminants degrade the health of fish and sometimes lead to fish kills.

How was the outcome derived? Who came up with it?

The outcome is based on the findings of the January 2013 Chesapeake Bay Program report that revealed more information is needed to formulate effective reduction strategies for contaminants. The U.S. Department of the Interior worked with the U.S. Environmental Protection Agency, the Chesapeake Bay Commission, states and the District of Columbia to develop the outcome based on over 400 related public comments received on the agreement.

What was the basis or baseline?

The results from the January 2013 Chesapeake Bay Program report were used to develop the outcome. These results showed widespread extent of several contaminant groups. The results also showed that a combination of contaminant groups with widespread and local extent and/or contaminants of emerging concern (like pharmaceuticals or personal care products) have degraded the health of several species of fish and wildlife. The results are based on impairments developed by watershed jurisdictions, which rely on the monitoring of select contaminants in water, sediment and fish tissue.

For More:

http://www.chesapeakebay.net/issues/issue/chemical_contaminants
http://executiveorder.chesapeakebay.net/ChesBayToxics_finaldraft_11513b.pdf

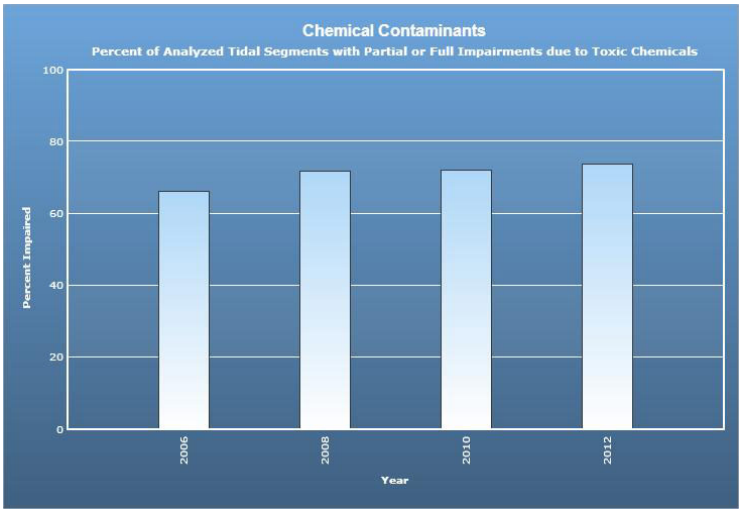
Toxic Contaminants Policy and Prevention

OUTCOME

Continually improve practices and controls that reduce and prevent the effects of toxic contaminants below levels that harm aquatic systems and humans. Build from existing programs to reduce the amount, and effects, of PCBs in the Bay and watershed. Use research findings to evaluate the implementation of additional policies, programs and practices for other contaminants that need to be further reduced or eliminated.

Why is this outcome important?

The toxic contaminants that are widely distributed in the Chesapeake Bay watershed harm the health of fish and wildlife and present risks to human health that limit the amount of fish that people can consume. The presence and potential risk of some of these contaminants are well understood, but current efforts to reduce their impacts are producing limited results. The Chesapeake Bay Program, therefore, is recommitting itself to coordinating among federal agencies and watershed jurisdictions to find ways to improve the practices and controls intended to reduce the input of certain contaminants.



See how chemical contaminants are doing at chesapeakebay.net

Current Conditions:

In 2012, close to 74 percent of the tidal water segments of the Chesapeake Bay were either fully or partially impaired due to toxic contaminants, up from 66 percent in 2006.

Contaminants like polychlorinated biphenyls (or PCBs) are responsible for extensive impacts in the Bay watershed. Because PCBs accumulate in fish tissue, jurisdictions have issued recommendations for limiting the consumption of fish from the Bay and its watershed.

How was the outcome derived? Who came up with it?

An *ad hoc* group of representatives from federal agencies and watershed jurisdictions considered the highest-priority pollutant to focus on first (PCBs) and committed to reducing other contaminants in the future as further priorities are identified.

What was the basis or baseline?

The basis for the outcome was the extent of identified impairments, or those areas where pollutants are affecting the ability of the Bay to act as an ecological resource due to toxic contamination. The states have set minimum water quality goals and in many cases they are not met due to PCB contamination.

For More:

http://www.chesapeakebay.net/issues/issue/chemical_contaminants
http://executiveorder.chesapeakebay.net/ChesBayToxics_finaldraft_11513b.pdf
http://www.epa.gov/epawaste/hazard/tsd/pcbs/index.htm