

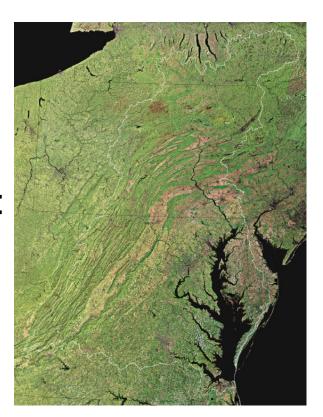
Extent and Severity of Toxic Contaminants in Chesapeake Bay and the Watershed

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Need for Report

- Contaminants effect fish and wildlife
- CBP Toxics 2000 Strategy
- New concerns
- EO Strategy
- Used by EPA and CBP to consider:
 - Goal for reducing toxic contaminants
 - future research and monitoring activities





Approach

- Define extent and severity
 - Widespread, localized, or uncertain
- Extent
 - Jurisdictional assessment reports
 - Published summaries
- Severity
 - Impairments
 - Fish consumption advisories
- Monitoring/Research



Contaminant Groups

- Polychlorinated biphenyls
- Dioxins and Furans
- Polyaromatic hydrocarbons
- Petroleum hydrocarbons
- Pesticides
- Pharmaceuticals
- Household and Personal Care Products
- Polybrominated diphenyl ether Flame Retardants
- Metals and Metalloids
- Biogenic hormones
- Effects on fish and wildlife



Extent and Severity

Extent

Widespread: PCBs, PAHs, some herbicides, mercury

<u>Localized</u>: dioxins, petroleum, some pesticides and some metals

<u>Uncertain</u>: pharmaceuticals, care products, flame retardants, some pesticides, hormones

Severity

Widespread: PCBs and mercury

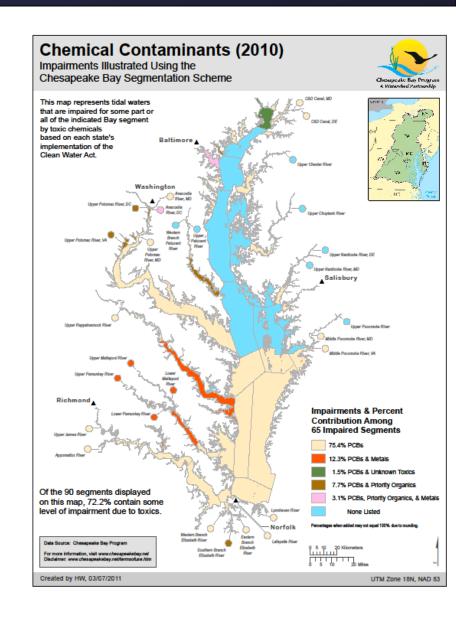
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Biological Effects

- Fish consumption advisories
 - PCBs in fish tissue
- Degraded fish health
 - Reproductive system
 - Tumors
 - Immune systems
- Wildlife
 - Reproductive effects





Next Steps

- Addressing reviewer comments
 - Independent, peer reviews
 - CBP partner reviews
- Report released
- EPA and CBP consider toxic contaminants during alignment process
 - Decide on policy directions
- Science enhanced to address monitoring and research gaps