



Portland Harbor CAG Meeting

Evaluating Stormwater Discharges

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Presentation Overview

- How DEQ is Making Stormwater Source Control Decisions
 - Interpreting stormwater data
 - Assessing source control needs
- Insights from the Draft Portland Harbor Remedial Investigation (RI)
 - Contaminant loads from stormwater
 - Potential future loads after source control



Goal of Stormwater Source Control

Ensure discharges are identified and evaluated by the time EPA issues the ROD, and controlled on a schedule that ensures cleanup can proceed without significant risk of contamination.



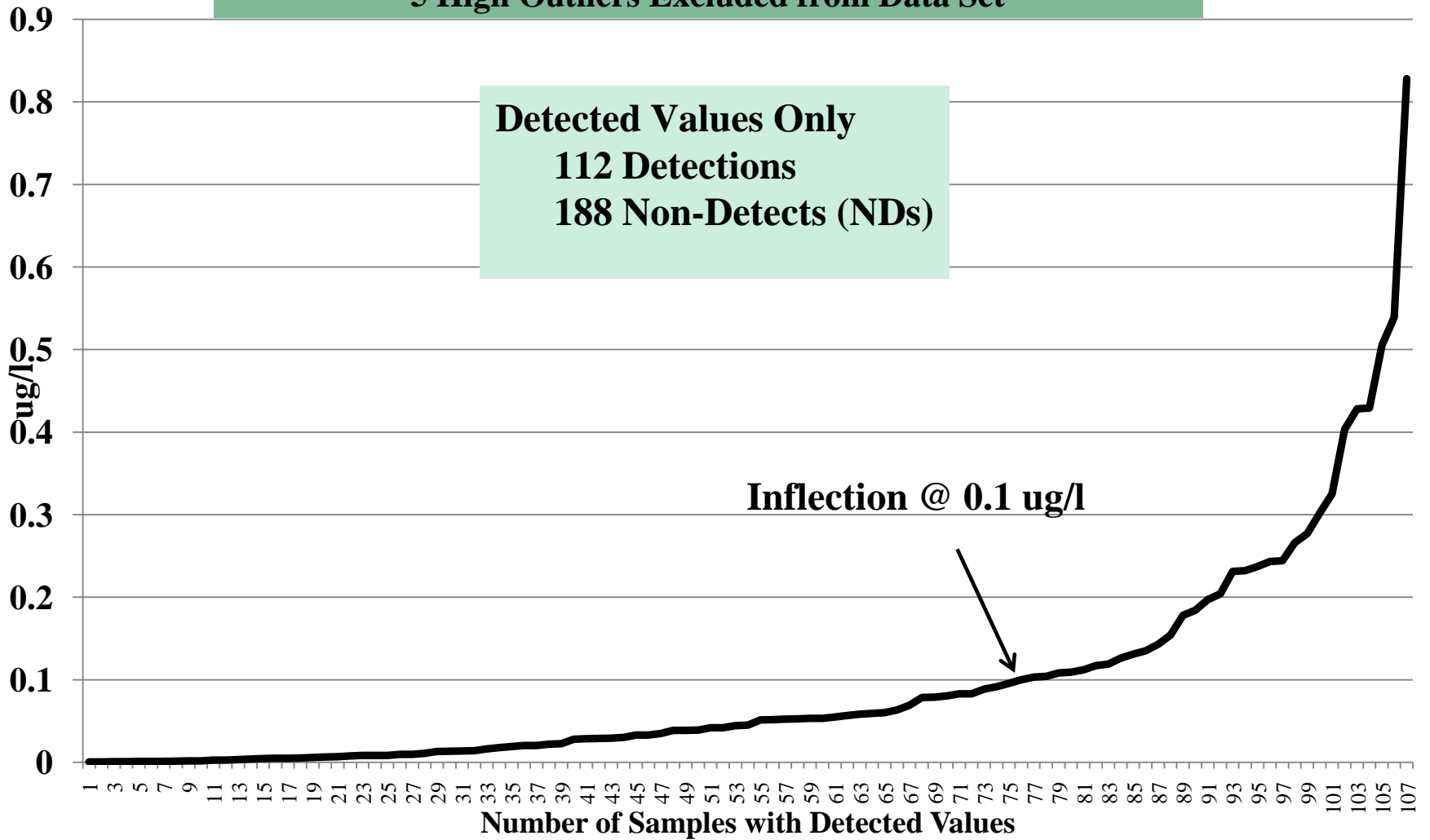
Evaluating Stormwater Discharges

Challenges:

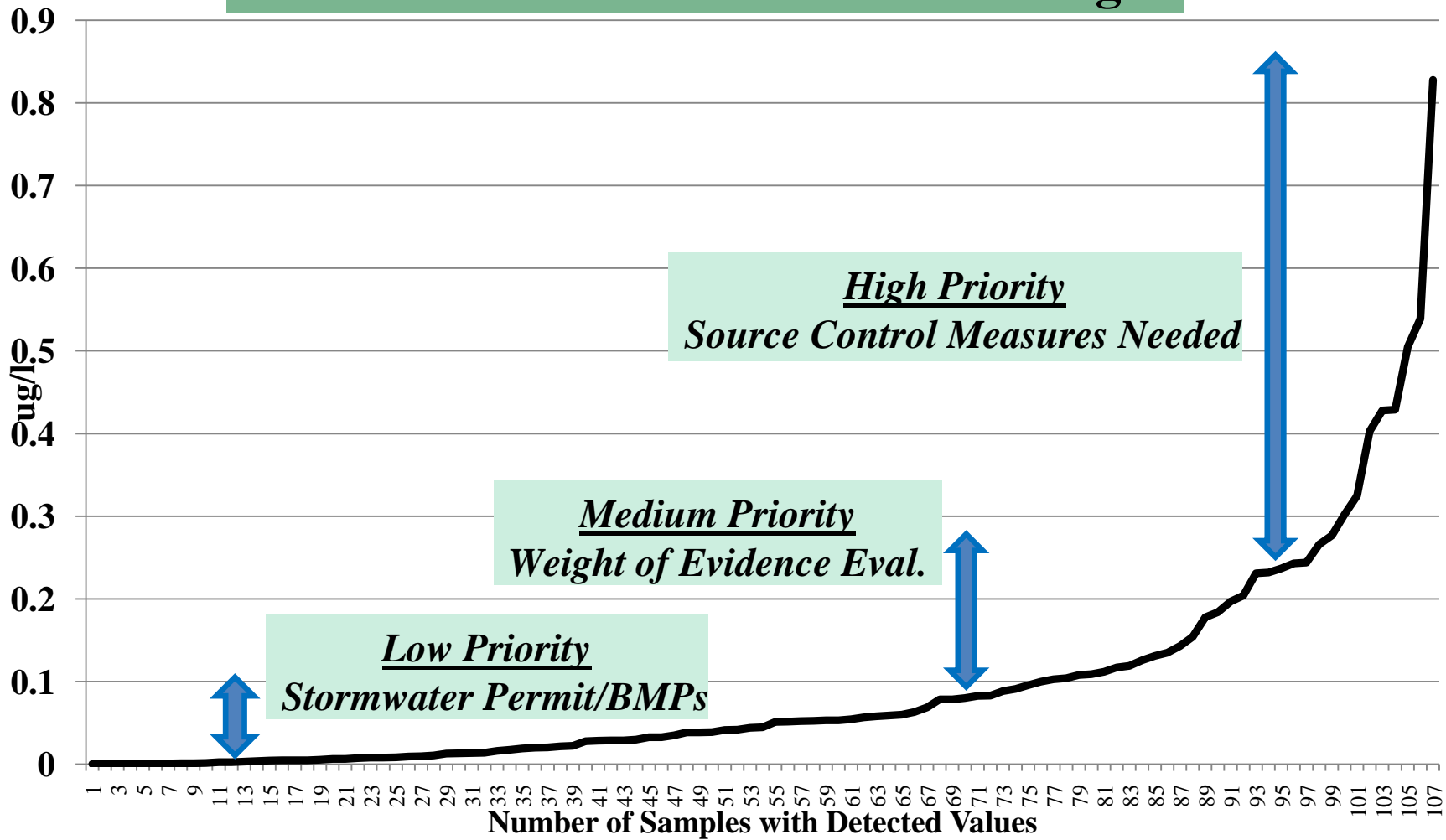
- Screening numbers (SLVs) not developed specifically for stormwater
- Little data to understand “typical” concentrations in stormwater

Total PCBs (ug/l) in Stormwater Discharges at Heavy Industry (HI) Sites

5 High Outliers Excluded from Data Set



Total PCBs (ug/l) in Stormwater Discharges at HI Sites
Interpreting Stormwater Data
for Source Control Decision-Making





Draft Portland Harbor RI Report

What can we glean from the Report?

- Contaminant loading from stormwater relative to other sources
- Stormwater loading from different land use types and individual sources
- Potential future loads following source control



Draft RI Report

Main Sources of PCBs to Harbor

- Upstream 4.7 kg/yr
- Stormwater 2.03 kg/yr
- Atmospheric 0.62 kg/yr
- Advection thru sediments 0.2 kg/yr



PCB Load from Stormwater

	% of Total Acreage	Contribution to PCB Load
Open Space	57%	0.02%
Major Transportation	2%	0.8%
Residential/ Commercial	8%	1.0%
Light Industrial	8%	1.6%
Heavy Industrial	25%	96%



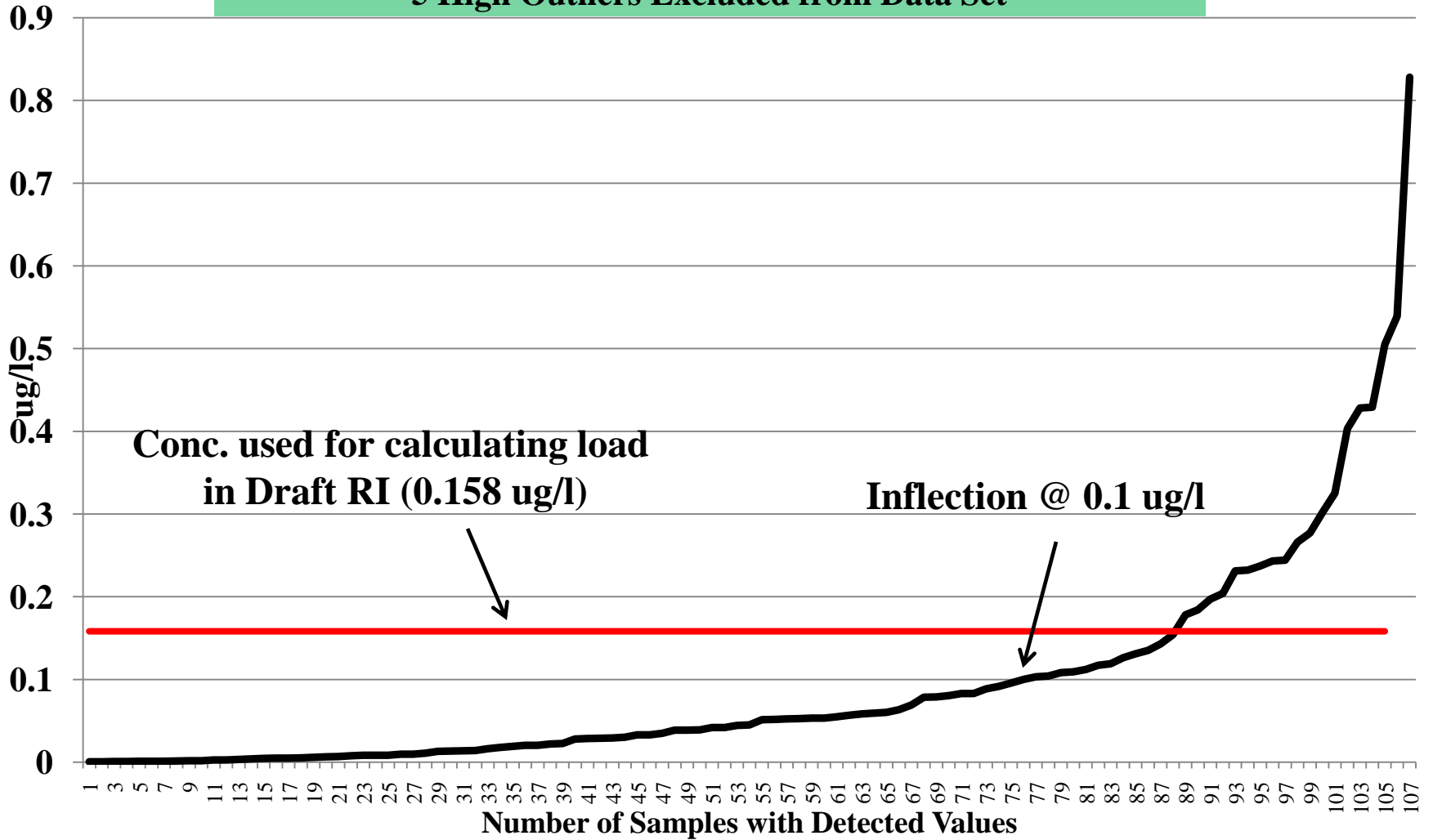
Land Use Concentrations vs. SLV

Draft RI: Basin-weighted mean PCB conc.:

- Heavy Industry 0.158 ug/l
- Major Transportation 0.033 ug/l
- Residential 0.021 ug/l
- Light Industry 0.014 ug/l
- Parks/Open Space 0.002 ug/l
- *JSCS SLV*** 0.000064 ug/l

Total PCBs (ug/l) in Stormwater Discharges at Heavy Industry (HI) Sites

5 High Outliers Excluded from Data Set





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