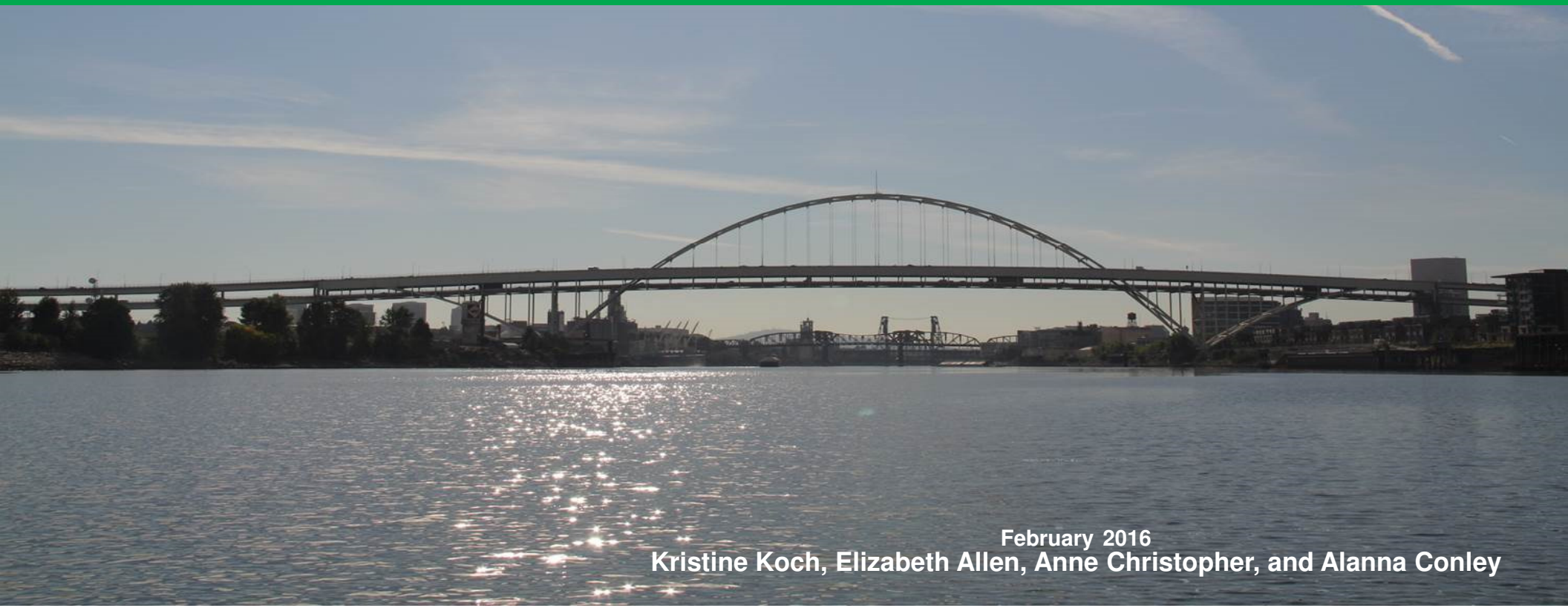
Bridge to the Portland Harbor Cleanup



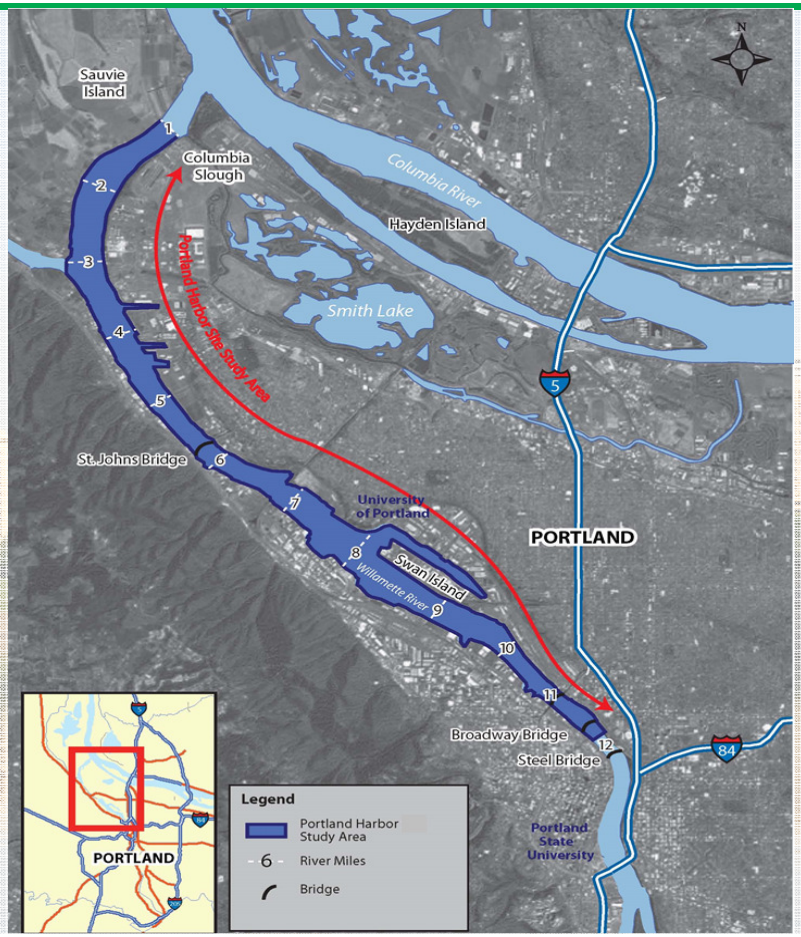
February 2016

Kristine Koch, Elizabeth Allen, Anne Christopher, and Alanna Conley

Portland Harbor Superfund Site

- Where is it?
- What is it?
  - Superfund Process & Goals
- Why does it matter to you and the community?
- How and when should the community engage?

Where is Portland Harbor and how is it used?



- Industry
- Recreation (boating, swimming, camping)
- Fishing
- Shipping/Navigation
- Ecological habitat
- Tribal fishing and ceremonial practices
- Migratory corridor for salmon

What are the goals of Superfund?

- Protect human health and the environment
- Encourage participation of States and Tribes
- Provide opportunity for community engagement
- Make responsible party pay for cleanup

Where is Portland Harbor in the Superfund Process?

We are here

*Estimated dates

2000 - - - - -> 2010 | 2011 | 2015 | 2016* | end of 2016*

There Is A Problem

Portland Harbor Listed as Superfund Site (2000)

Sampling, Analysis, Early Actions, Uplands Cleanup (2000-)

What and where are the risks?

Remedial Investigation (RI) and Risk Assessment

Human Health & Ecological Risk Assessments 2013

How could it be cleaned up?

Feasibility Study (FS)

EPA's Proposed Clean-up Plan

Proposal for formal public comment

•Tribal Consultations

•***Formal Public Comment Period***

Final Decision: How It Will Be Cleaned Up

EPA's Record of Decision (ROD)

Harbor Cleanup

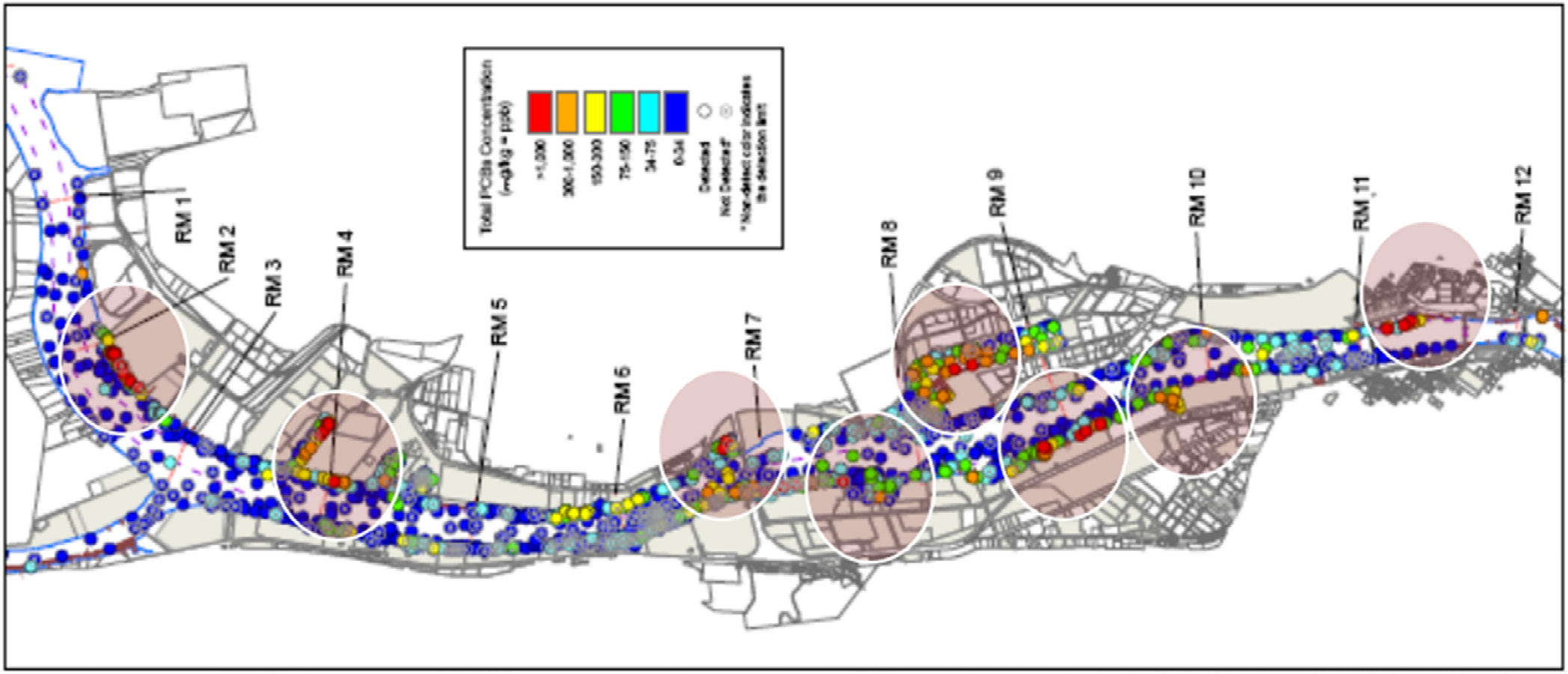
How did Portland Harbor become contaminated?

- Ship building, repair & dismantling
- Wood products & wood treating
- Chemical manufacturing and distribution
- Metal recycling, production & fabrication
- Manufactured gas production
- Electrical production & distribution
- Bulk fuel distribution & storage
- Asphalt manufacturing
- Steel mills, smelters & foundries
- Commodities shipping terminals
- Rail yards

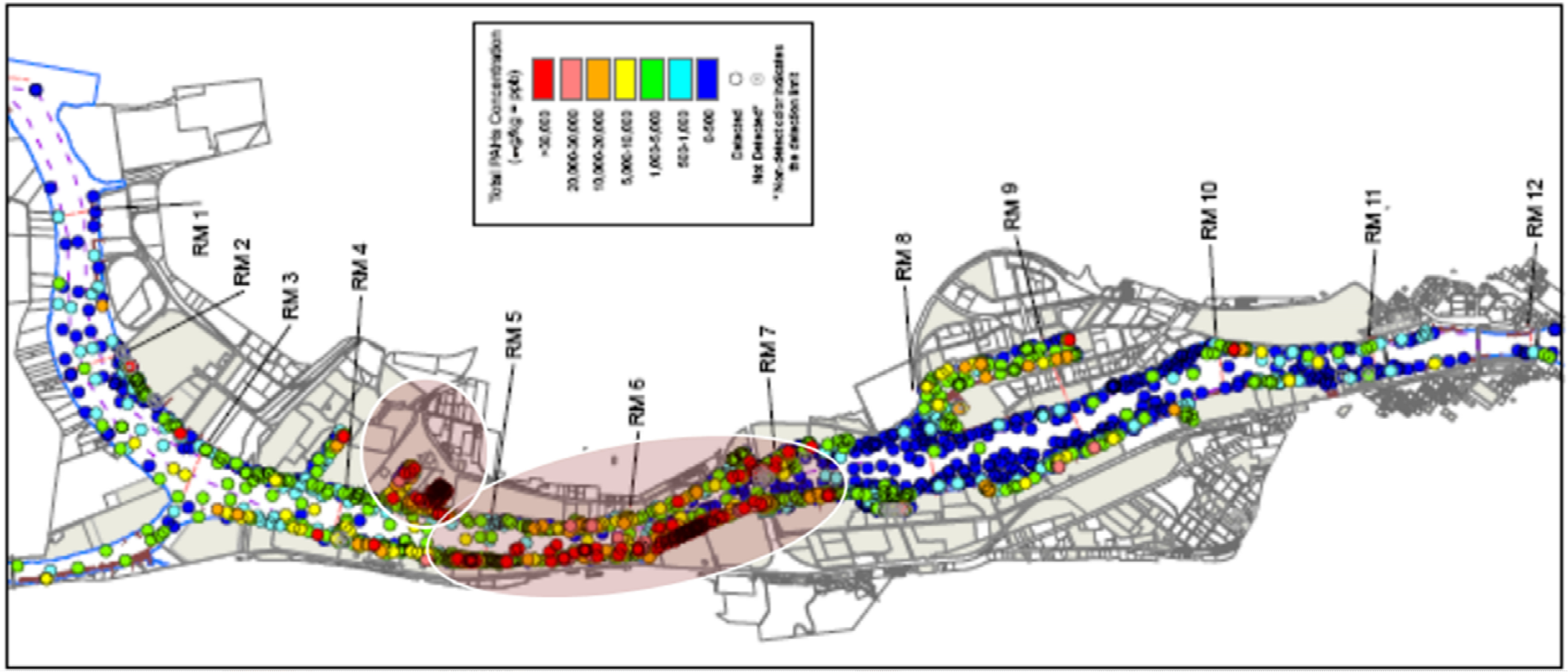
What are the pollution issues?

- 65 contaminants of concern
  - Metals
  - Pesticides/Herbicides
  - Dioxins/Furans
  - PCBs
  - PAHs
- "Persistent organic pollutants"
  - not readily broken down in the environment
- Widespread vs. local contamination

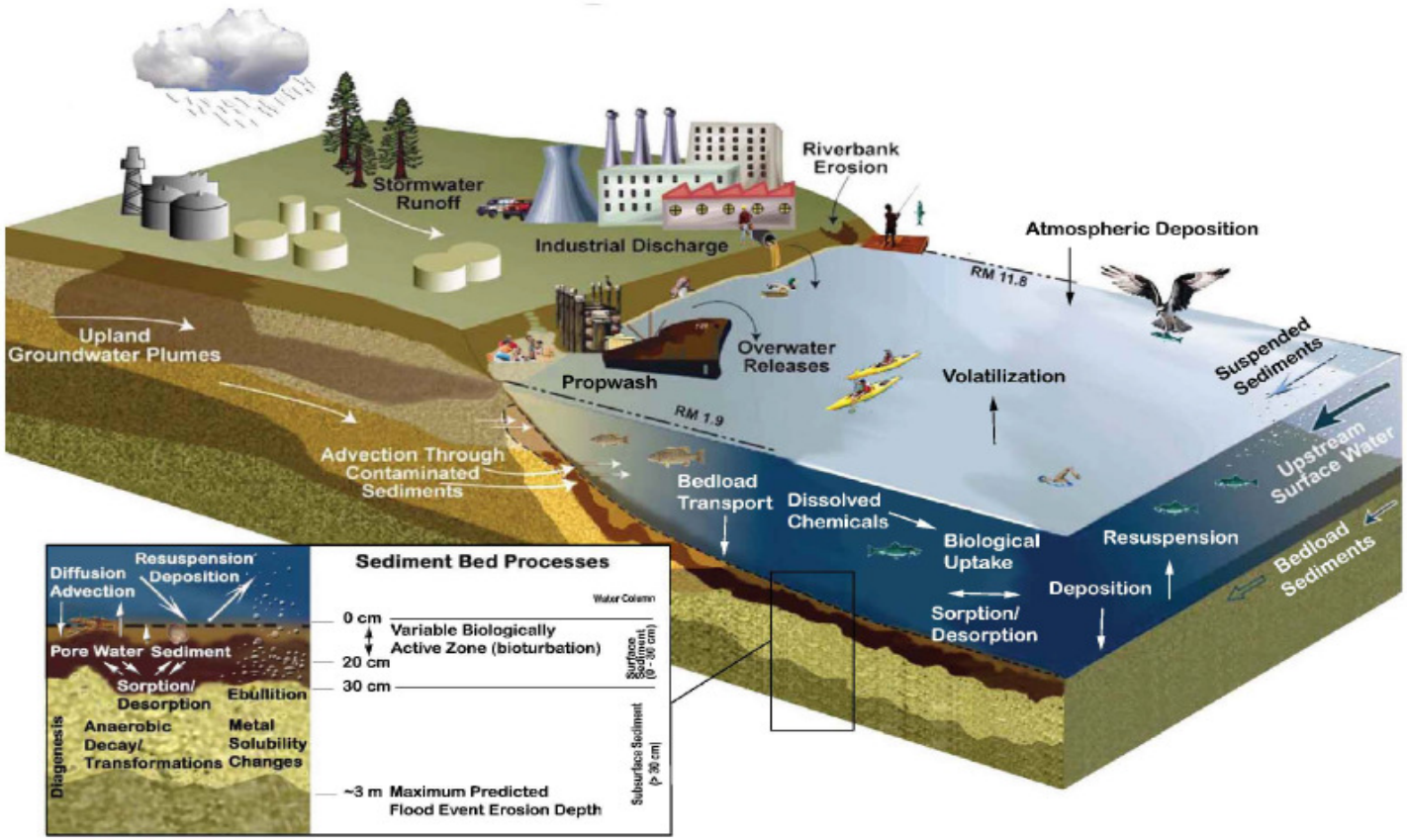
Where is the contamination?



Where is the contamination?



How did contamination get to the river?



SOURCE: Figure created from PDF provided by Integral Consulting, Inc.

What are the impacts to wildlife and fish?

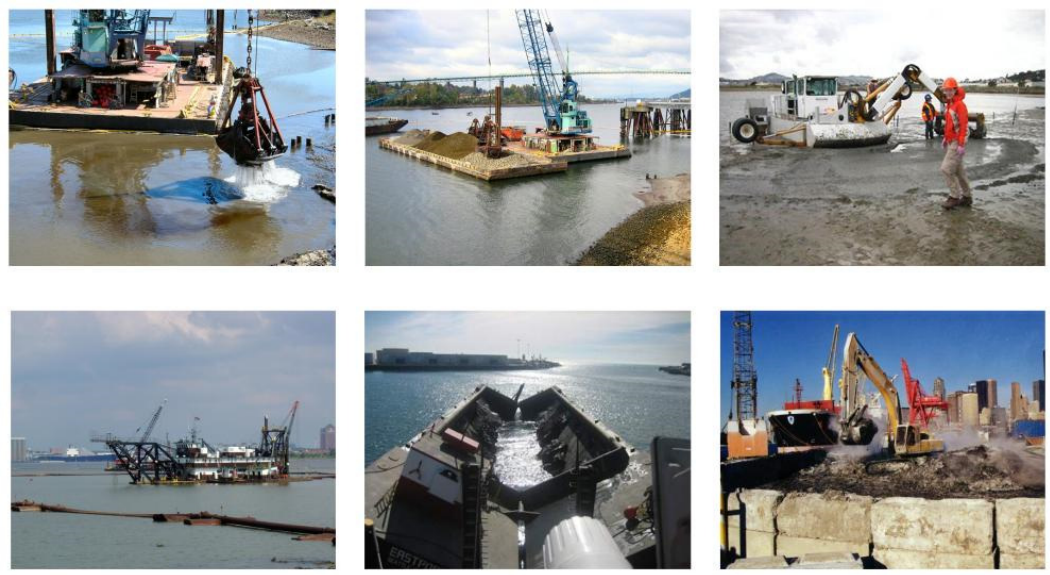
- Worms and bugs exposed to contaminants in river bottom
  - Survival, reproduction and growth
- Fish accumulate contaminants through food chain and exposure
- Birds and mammals feed on fish and bugs

What are the risks to people?

- Mainly from eating contaminated fish
- Resident fish pose greatest risk
  - carp, bass, catfish
- Children and infants are most vulnerable

What are the cleanup methods?

Dredging **Capping** **Treatment**



- **Dredging**
- **Capping**
- **In-situ Treatment**
- **MNR/EMNR**

How will the river get cleaned up?

- Cleanup will be a combination of methods
- Finding the right combination considers
  - Protection of human health and the environment
  - Time for recovery
  - How it impacts the community
  - Costs

Why does this cleanup matter?

- **EPA**
  - **Protecting habitat, fish/wildlife and health**
- **Business**
  - **Cleanup costs**
  - **Economic benefits**
- **Community**
  - **Future Uses of River – what is your vision?**
  - **Eating More Fish**
  - **Neighborhood Impacts**

How and when should the community engage?

- **Participate in information sessions:**
  - ✓Feb 8th - 7pm, Audubon Society
  - ✓Feb 9th - 7pm, League of Women Voters
  - ✓Feb 11th - 7pm, Matt Dishman Center
  - ✓Feb 18th - 6:30pm, Wilson HS Cafeteria
  - ✓March 3rd – 7pm Webinar – more info coming soon!
  - ✓March 19th – 1pm, Matt Dishman Center

- **April – Proposed Plan, Public review & comment**
  - ✓ Series of pubic meetings
  - ✓ Oral comments
  - ✓ Written comments
  - ✓ Email comments
  - ✓ Postal mail

EPA's Portland Harbor Web page: http://go.usa.gov/3Wf2B

Thank You!

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