

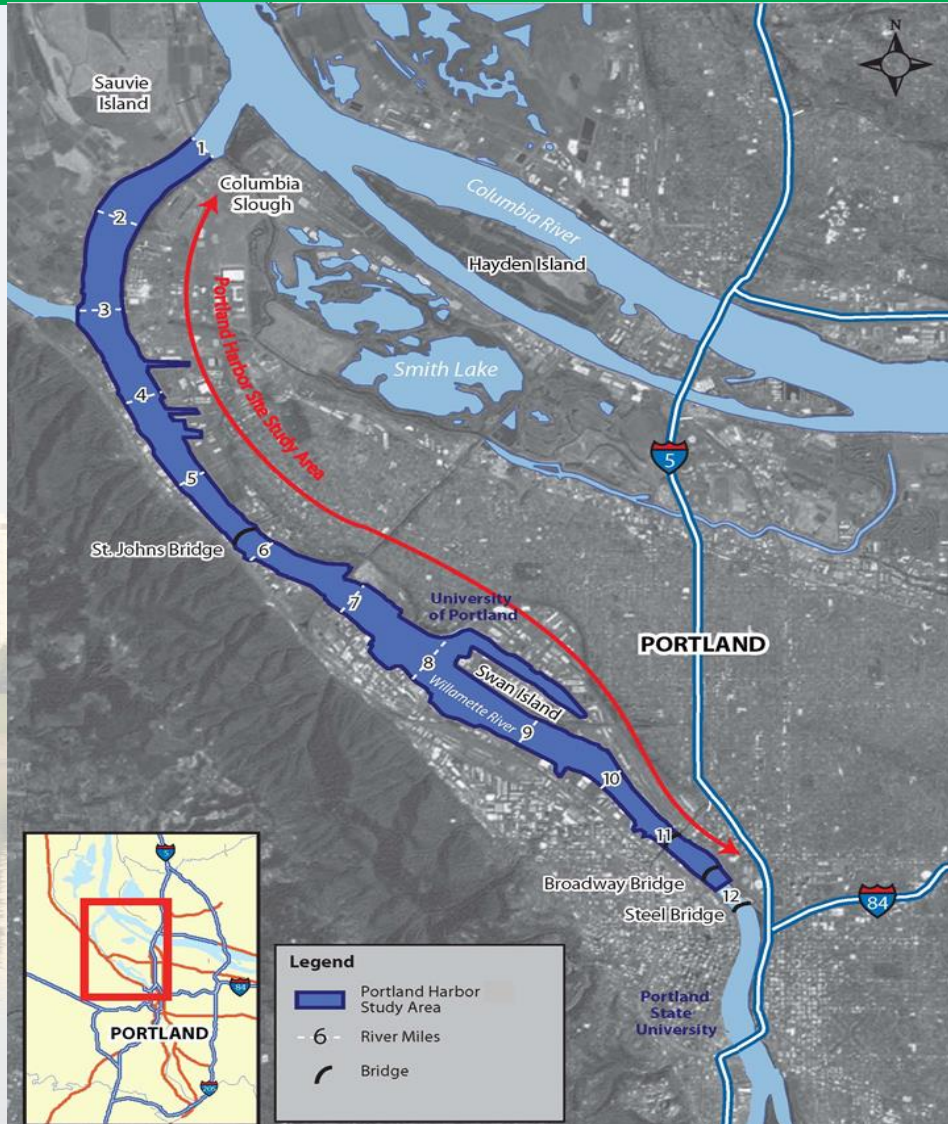


Portland Harbor Superfund Site

- **Where is it?**
- **Superfund Process**
- **Site Information**
- **Process Moving Forward**



Where is Portland Harbor?



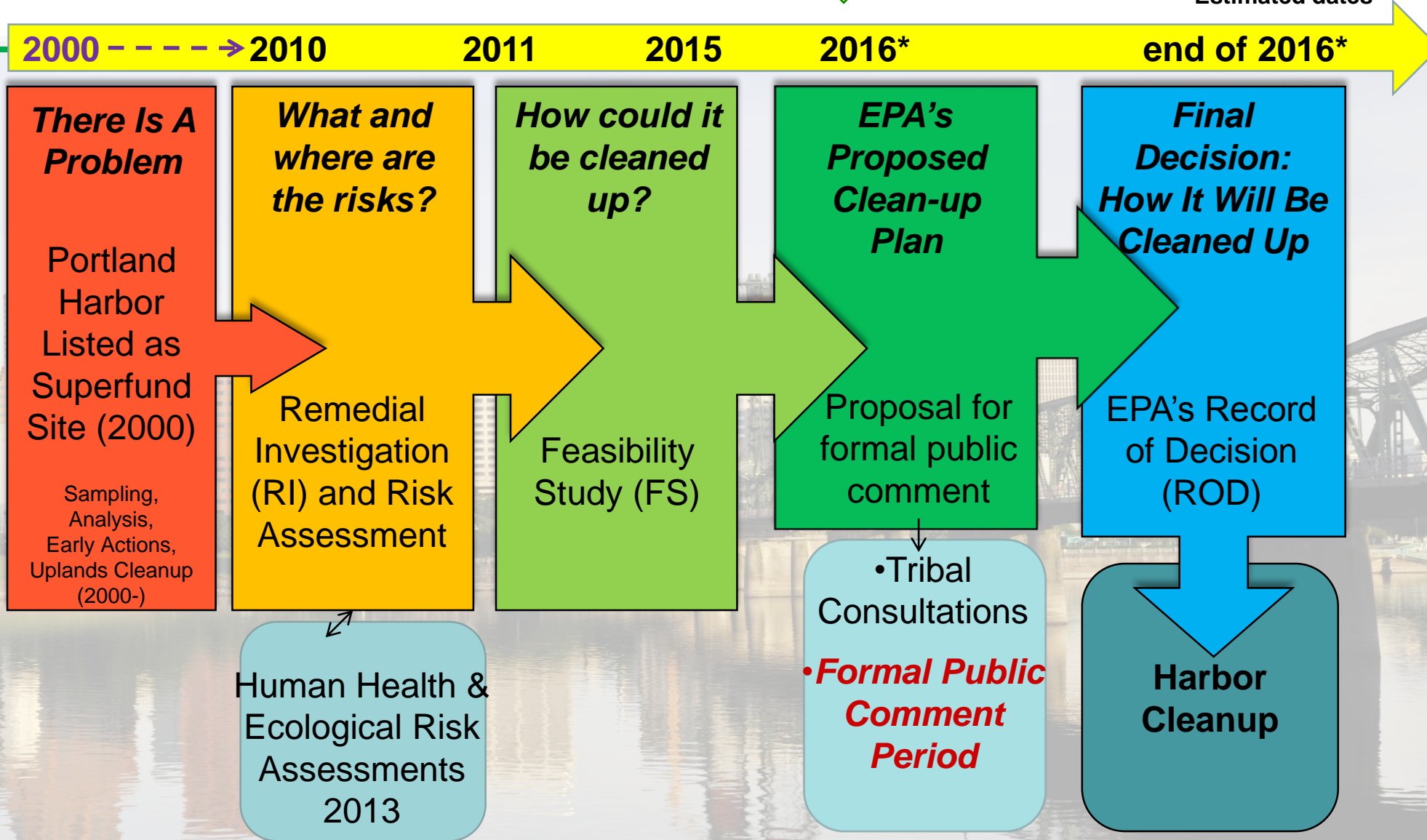
- Industry
- Recreation (boating, swimming, camping)
- Fishing
- Shipping/Navigation
- Ecological habitat
- Tribal fishing and ceremonial practices
- Migratory corridor for salmon



Where is Portland Harbor in the Superfund Process?

↓ We are here

*Estimated dates





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**





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?

FISH ADVISORY

Atención Chúj 注意 Вниманиe 注意

Fish from these waters may be harmful to eat, especially for children, pregnant or nursing women, and women of childbearing age.

The graphic is divided into two horizontal sections. The top section has a green background and contains a white icon of a fish on a plate with a fork and knife, followed by two boxes: one with a salmon labeled 'SALMON' and one with a steelhead labeled 'STEELHEAD'. The bottom section has a red background and contains a white icon of a fish on a plate with a red prohibition sign over it, followed by three boxes: one with a bass labeled 'BASS', one with a catfish labeled 'CATFISH', and one with a carp labeled 'CARP'.



More information call 1-877-290-6767
www.healthoregon.org/fishadv



- 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

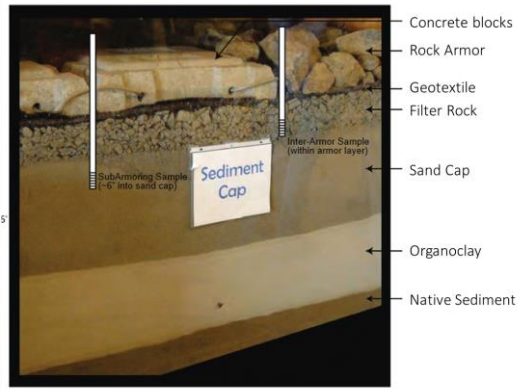
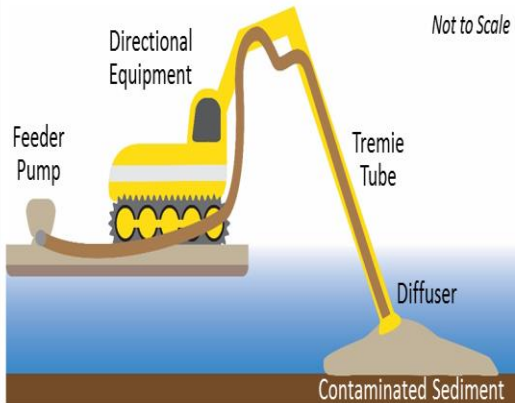


- Dredging

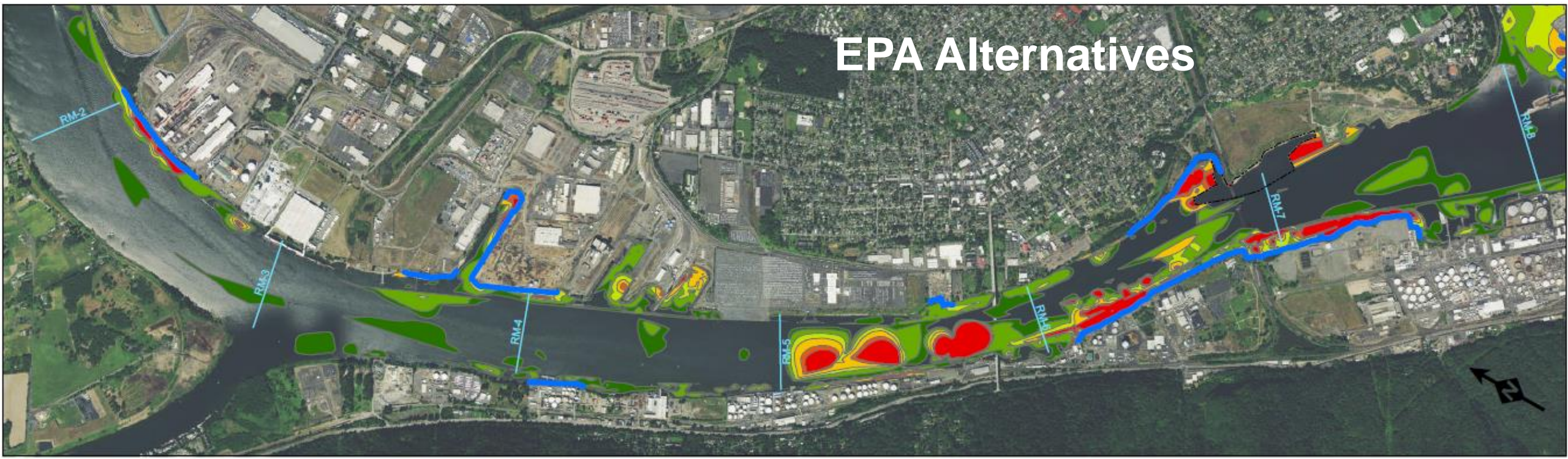
- Capping

- In-situ Treatment

- MNR/EMNR



EPA Alternatives

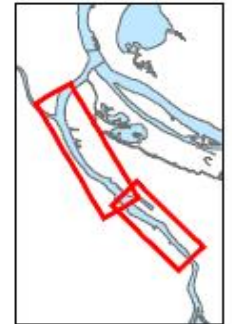
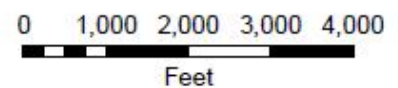


Legend

— Site with Known Contaminated Riverbank

Alternative SMAs

- Alternative B
- Alternative C
- Alternative D
- Alternative E
- Alternative F
- Alternative G





What are the Cleanup Options?

Alternative B

In-situ Treatment
7%

EMNR 5%
M&B Cap 1%

SMA 4%

102 Acres

Dredge 16%

Cap 22%

Dredge/Cap 7%

Nav/FMD Dredging 48%

MNR 90%

Alternative G

EMNR 1%

M&B Cap 1%

SMA 34%

756 Acres

Dredge 8%

Dredge/Cap 7%

Cap 24%

Nav/FMD Dredging 61%

MNR 64%



How and when should the community engage?

- **Participate in information sessions:**
 - ✓ Feb 11th - 7pm, Matt Dishman Center
 - ✓ Feb 18th - 6:30pm, Wilson HS Cafeteria
 - ✓ March 3rd - 7pm Webinar – more info coming soon!
 - ✓ March 17th - 7pm, SE Portland, Location TBD
 - ✓ March 19th - 1pm, Matt Dishman Center
 - ✓ March 26th - 12noon OMSI (OR Museum of Science and Industry)
- **April – Proposed Plan, Public review & comment**
 - ✓ Series of public meetings
 - ✓ Oral comments
 - ✓ Written comments
 - ✓ Email comments
 - ✓ Postal mail



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