Columbia Slough Fish Advisory

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Columbia Slough Watersheds

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Community Engagement Liaisons

Sharing our public services, benefits, and burdens more equitably requires intentional engagement of underserved communities.

- Are English-fluent, City of Portland-trained civic activists
- Are respected elders or activists in their communities
- Provide effective and authentic public participation.
Columbia Slough

19 miles long of waterways + 12 miles of side channels

32,700 acres

Across multiple Jurisdictions

~100 years of industrial & agricultural activities
Columbia Slough – A Gem in the City
City is working with DEQ to address widespread contamination throughout Slough sediments and fish tissue.

General approach:
- City outfall basin characterization and prioritization
- Upland source investigations
- Source Investigation & Control
- Stormwater treatment in selected City-outfall basins for City owned rights-of-way
- Monitoring (sediment and fish tissue)
- Fish Advisory Outreach
Core messages:

• Pollutants bioaccumulate in fats

• Limit consumption of resident fish:
  ➢ No more than 2 meals a month
  ➢ Prepare fish in a way that eliminates most of the fat

Fish is an excellent source of protein. However, some fish in the Columbia Slough may be contaminated with chemicals such as polychlorinated biphenyls (PCBs) and pesticides. The Oregon Health Authority (OHA) issued a fish advisory recommending fish from the Slough be eaten only 2 times a month. The fish should be cleaned and gutted as shown on the back of this flier.

Who is most at risk?
• Women who may become pregnant
• Developing babies in the womb, nursing infants, and children under 6 years of age
• People who eat a lot of fish from the Slough

What are the possible health risks from eating fish contaminated with PCBs and pesticides?
• Damage to early brain and nervous system development in children
• Harm to reproductive and immune systems
• Higher cancer risks

Which fish should I eat less?
Eating fish from the Slough, like those shown below, only 2 times per month. These fish live their entire lives in the Slough and have higher amounts of contaminants.

- Copper Rockfish
- Black Crappie
- Largemouth Bass
- Coho Salmon
- Rockfish
- Catfish
- Shad

Who is most at risk for consuming fish with PCBs and pesticides?
• Women who may become pregnant
• Developing babies in the womb, nursing infants, and children under 6 years of age
• People who eat a lot of fish from the Slough

What are the possible health risks from eating fish contaminated with PCBs and pesticides?
• Damage to early brain and nervous system development in children
• Harm to reproductive and immune systems
• Higher cancer risks
• Trained 7 CELs for educational outreach and information gathering through questionnaires
• Provide education to their communities on how to reduce risks from eating fish from the Slough
What Scientists Can Do Better

- Avoid jargon and acronyms when engaging them
- Provide information in multiple languages (it's important to know verbatim translation will not work well, the translation needs to cater to the level of education of the population)
- Identify who is at risk
- Provide incentives for participation
- Understand importance of fishing in community
- Understand cultural use of entire fish
What We Learned From The CELs

New refugees/immigrants:

• Are under intense stress and are missing community activities and therefore are difficult to reach

• Have fear and a lack of knowledge about US laws and government which can prevent open communication

• Are resistant to messages that go against their cultural norms

• Resist recommended fish preparation method - using head, skin and fat are part of their culture (highest contaminant concentrations)
What We Learned From The CELs

Where fish comes from
• Catch shared with friends and families
• Fish bought in local parking lots

Fish preparation
• Some cultures eat the whole fish
• Fat drippings are reused
• Recommendations for discarding parts considered wasteful

Fishing behaviors
• Higher awareness for those in US longer

Fish education
• Most people were interested in changing behaviors when informed