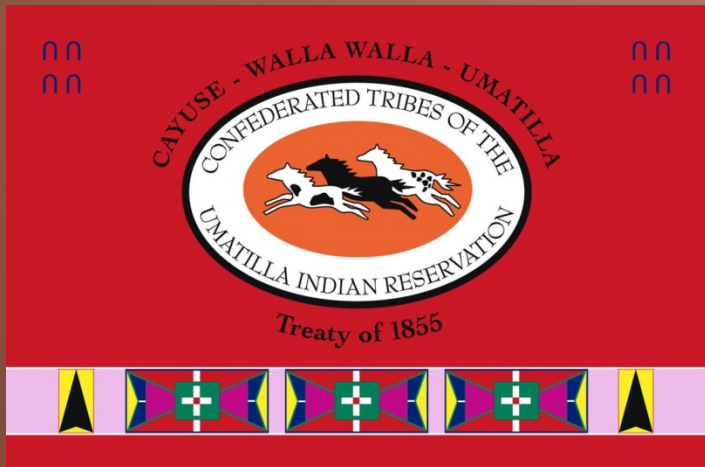
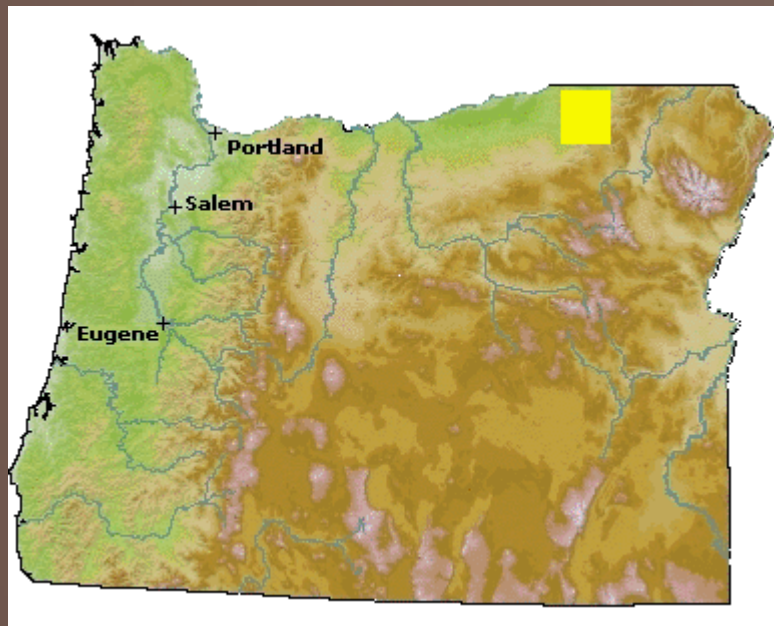


Re-evaluating Fish Consumption

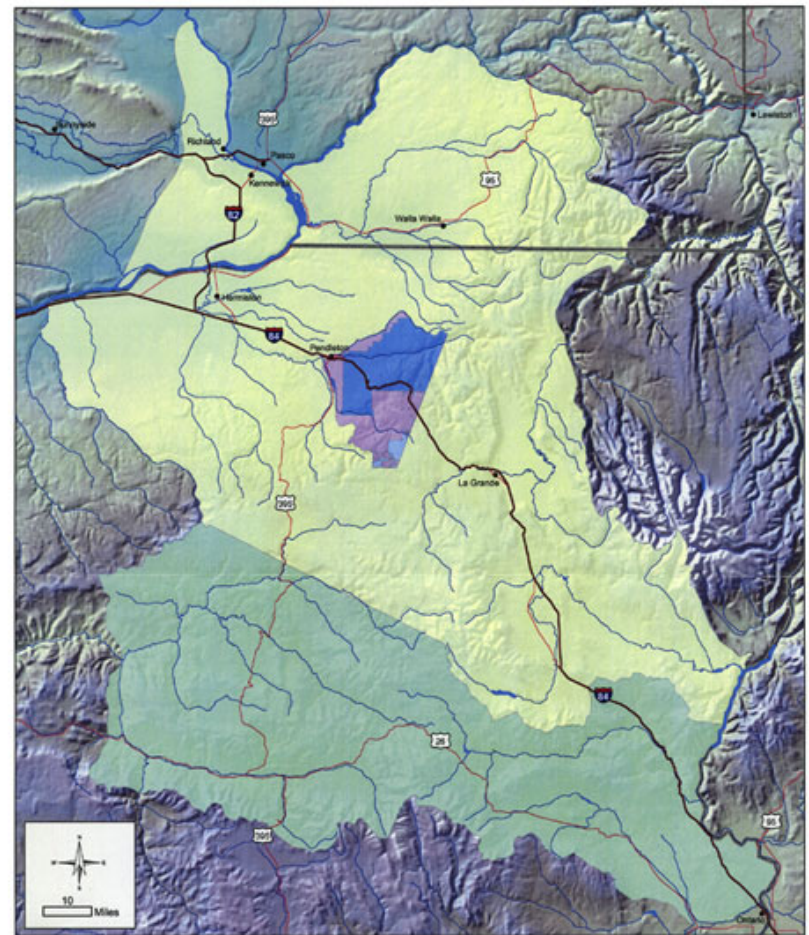
Good Science, Water Quality Criteria
and Protecting Fish Consumers



The Confederated Tribes of the Umatilla Indian Reservation



Confederated Tribes of the Umatilla Indian Reservation (CTUIR)
Legal Status of CTUIR Lands since 1855



Land Segment and Source of Status Changes

- Land Ceded in the Treaty of 1855
- CTUIR Aboriginal Use: Treaty of 1855 as adjudicated in CTUIR v. Maison II (1960) and CTUIR v. Maison III (1968)
- Today's Reservation
- Johnson Creek Restoration: Removed from reservation by act of Congress (1885). Reacquired by Congressional Act (1939) and DOI Departmental Order (1940)
- Surveyed Treaty Reservation: Established by the Treaty of 1855, surveyed 1871, and removed from the reservation by act of Congress (1885)
- Pendleton Notch: Removed from reservation by act of Congress (1882) for expansion of the City of Pendleton







DNR's First Foods Mission Statement

To protect, restore, and enhance the First Foods – water, salmon, deer, cous, and huckleberry – for the perpetual cultural, economic, and sovereign benefit of the Confederated Tribes of the Umatilla Indian Reservation.

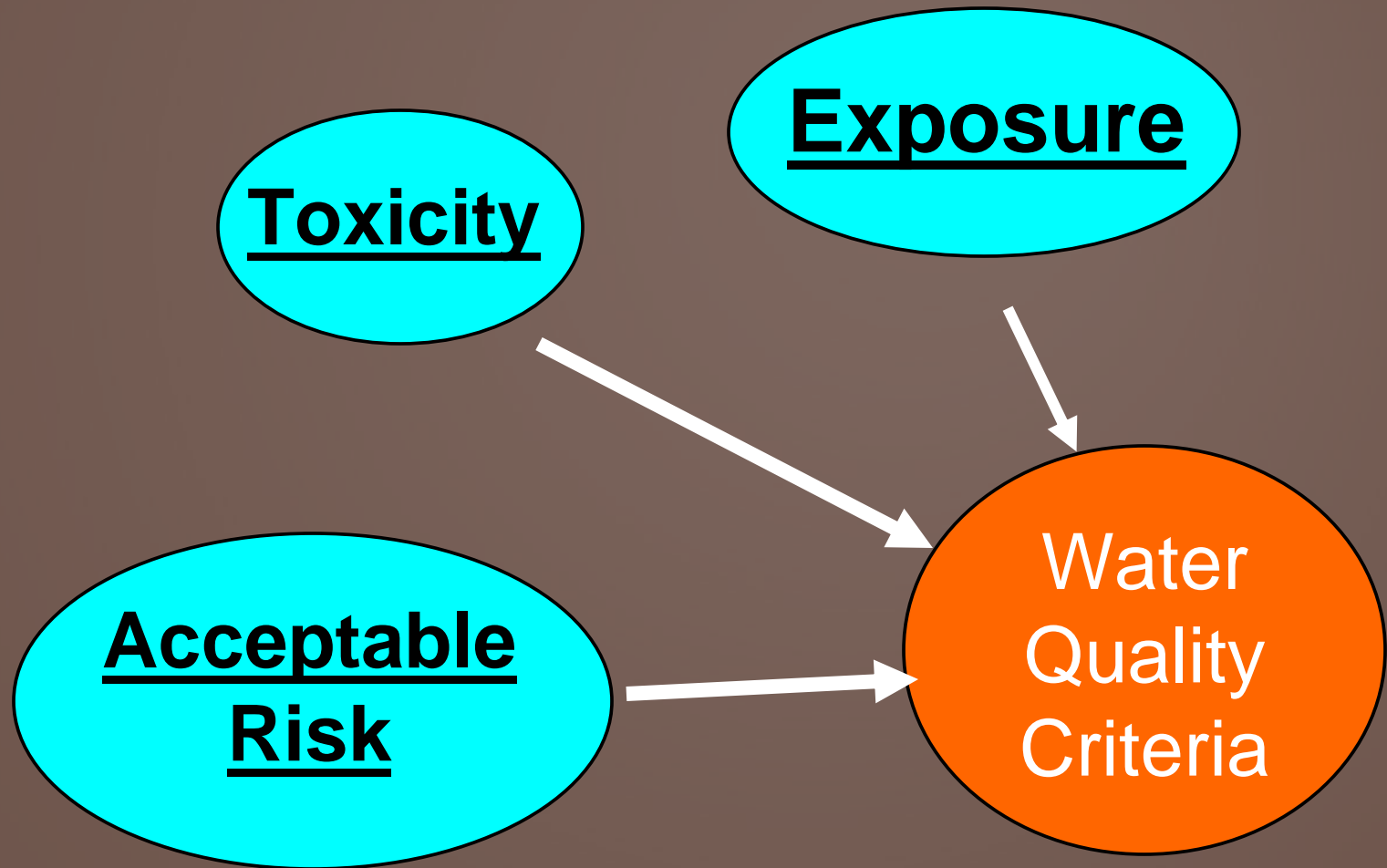


Human Health Criteria Must Protect the Beneficial Use

- Criteria must protect the designated use - fishing & fish consumption.



Risk and Water Quality Criteria



Water Quality Criteria

$$WQC = Toxicity \cdot \left[\frac{BW}{DI + (FCR \cdot BCF)} \right]$$



Goal - Setting toxic pollutants criteria to protect human health

- Tribal consumption survey provided info on fish consumption 204 children (ages 5 and younger).

- 70% of children eating fish at end of the first year of life.

- 26% at 6 months – fish is a first food

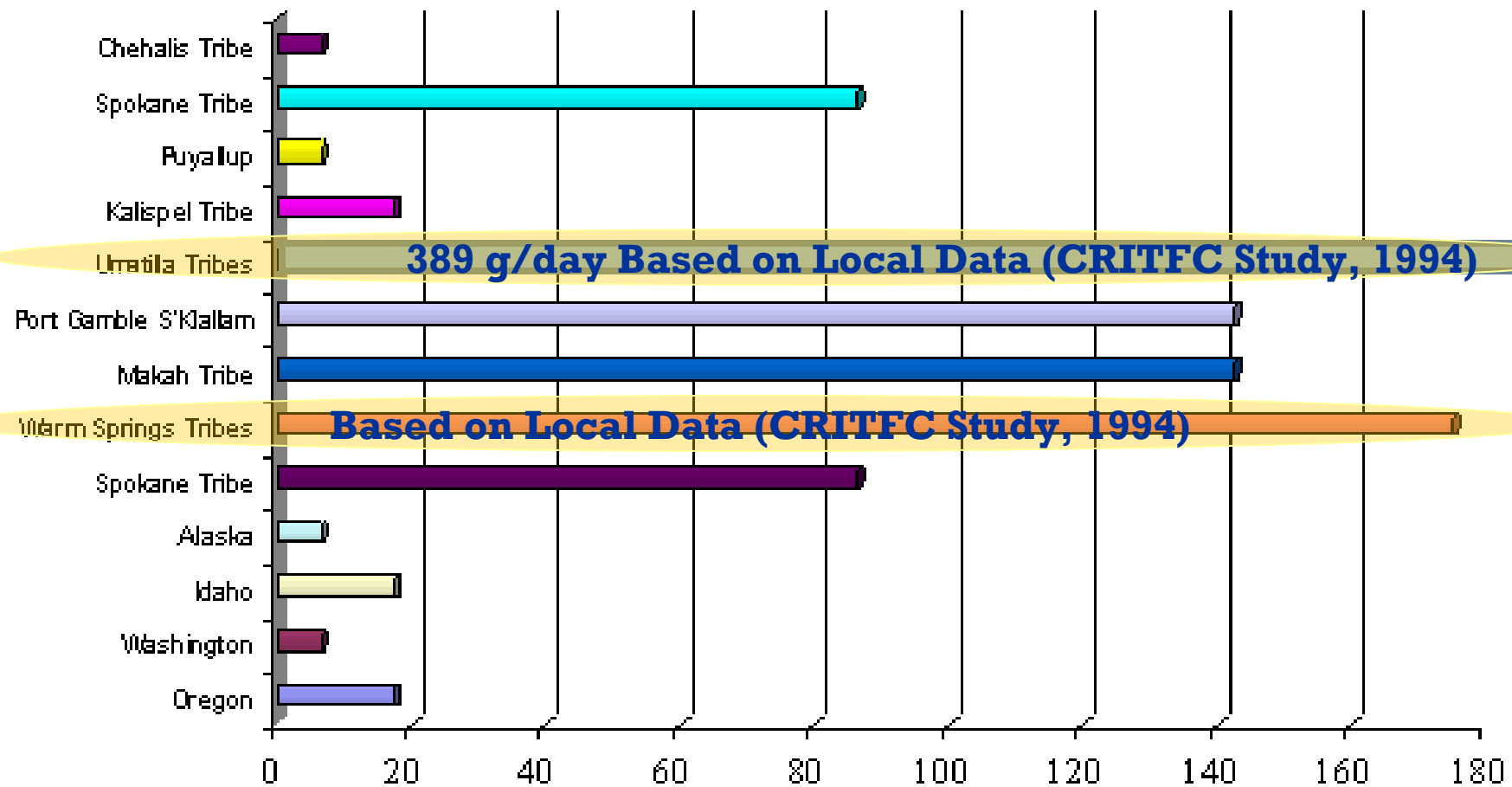
- Tribal children rate estimated 19.6 g/day

- Nationally 8% women of child bearing age with mercury levels exceed EPA reference level 5.8 mg/L blood

- Largest correlation was with amount of fish ingested

- Native Americans, Pacific Islanders, and Asians had the highest levels

National Minimum Default Fish Consumption Rate & Regional Comparison



Fish Consumption Rates

	statistic grams per day					
	<u>mean</u>	<u>median</u>	<u>75%</u>	<u>90%</u>	<u>95%</u>	<u>99%</u>
Current WQ criterion rate				17.5		
Columbia River Tribes	63	40	60	113	176	389
Squaxin Island Tribe	62	29	79	141	221	332
Tulalip Tribe	72	45	85	186	244	312
Asians & Pacific Islanders	117	78	139	236	306	NA
U.S. General Population fish consumers	127	99	NA	248	334	519
Suquamish Tribe	214	132		489	NA	NA

Fish Consumption Assumptions

95 TH PERCENTILE CRITFC
STUDY

EPA NATIONAL MINIMUM
DEFAULT VALUE

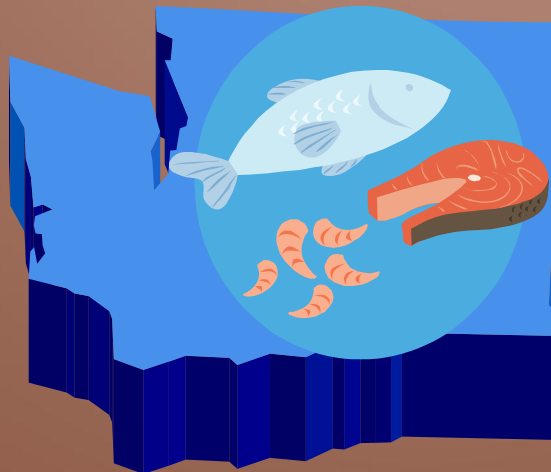


What are we Accomplishing in OR?

- ◉ New FCR for OR Water quality standard
- ◉ Considering several “fixes” or improvements that will make criteria more “usable”.
- ◉ It is possible to base water quality criteria on realistic fish consumption rate.
- ◉ All Oregonians will be better protected when we do.

What have we learned?

- States, tribes and other risk assessors need to consider best available data about tribal FCRs when making regulatory and RA decisions



WA FCR
6.5 grams/day
Less than 1 fish and
shellfish meal per
month

Contact - Resources

Kathleen Feehan,
Senior Policy Analyst
kathleenfeehan@ctuir.com
541-966-2357

**Human Health Focus Group
Report - June 2008
Oregon Fish and Shellfish
Consumption Rate Project**

[**http://www.deq.state.or.us/wq/standards/fishfocus.htm**](http://www.deq.state.or.us/wq/standards/fishfocus.htm)

