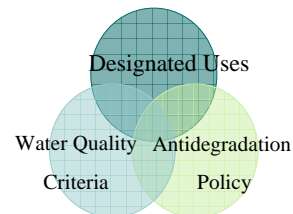


What Data Set Should You Use to Develop a Fish Consumption Rate?

EPA's national guidance on appropriate data sets for fish consumption rates and examples from other States/Tribes applying this guidance.

Review: Fish Consumption Rates and Water Quality Standards (WQS)

- What are the three components of WQS?
- What are the role of human health criteria in WQS?
- What are the components of the human health criteria?
- What is the role of the fish consumption rate in the human health criteria?



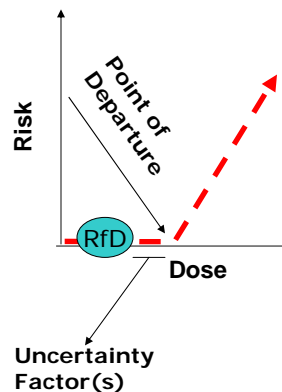
Review of WQS, Cont.



- In OR, all waters are designated as “fishable”;
- Oregon’s current criteria to protect this use is based on the national default fish consumption rate (17.5 g/day);
- Data demonstrate that some populations in Oregon consume more than the national default rate (e.g. tribal members);
- OR is reviewing the fish consumption rate used in its WQS in light of this data.

Criteria to Protect the Use: EPA’s Guidance on Reference Dose (RfD)-Based Chemicals

- RfD: Estimate of exposure that is likely to be without an appreciable risk of deleterious effects during a lifetime.
- EPA’s policy is that the RfD should not be exceeded;
- EPA recommends that States/Tribes consider the population most exposed via water and fish in setting criteria.

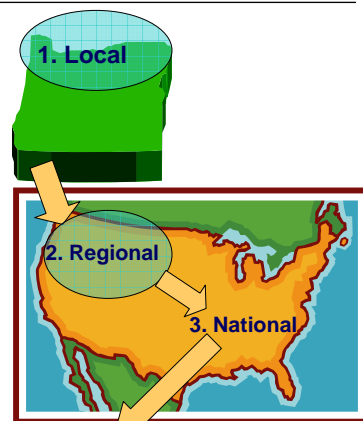


Why does EPA Have a “Preference Hierarchy” for Choosing a Fish Consumption Rate?

- EPA strongly emphasizes that States/Tribes should consider developing criteria to protect highly exposed population groups.
- EPA develops CWA Section 304(a) guidance values on a national scale- the current fish consumption rate represents the 90th percentile of people surveyed nationally (17.5 g/day).
- Fish consumption rates vary geographically and among different populations.
- Considering this, EPA emphasizes the use of local data (when available) over EPA’s default rates in developing a fish consumption rate.

EPA’s Preference Hierarchy for Fish Consumption Rates in WQS

- 1) Local data;
- 2) Data reflecting similar geography/population groups;
- 3) Data from national surveys; and
- 4) EPA’s default intake rates.



4. EPA Default Rates:

- General Population- 17.5 g/day
- Subsistence- 142.4 g/day

EPA's Preference Hierarchy, Cont.

- Local or Regional Data- EPA recommends:
 - Using local data for fresh/estuarine species;
 - Use of uncooked weight intake values;
 - Using either high-end values (90th or 95th percentile) or average values for high consuming fish population (if using mean, should base on consumers only).
- National Data- EPA recommends:
 - Select intake rate assumptions for different population groups from national food consumption surveys, e.g. 1994-1996 CSFII survey

Instance to Apply EPA's Default Fish Consumption Rates

- EPA's recommendations for applying its default fish consumption rates-
 - If State/Tribe **has not** identified a separate well-defined population of high-end consumers, and
 - believes that the default rate is representative;
 - the State/Tribe may choose EPA's recommended rates.



Use of Local/Regional Data vs. EPA's Default Values

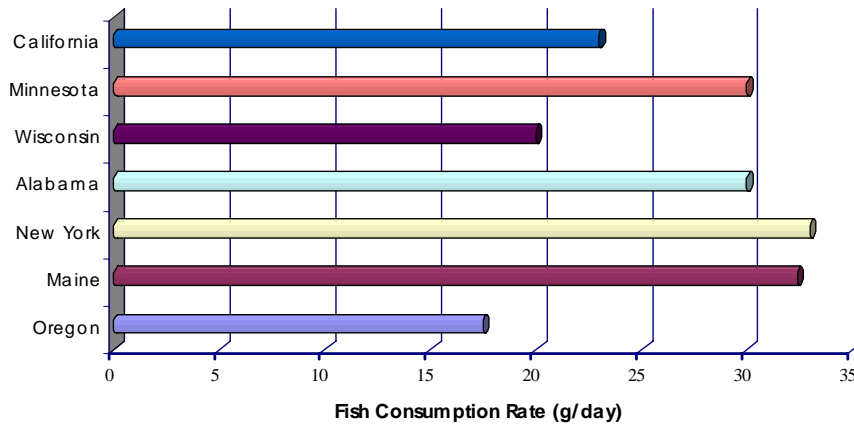
Relying on Local Data

State/Tribe	Rate (g/day)
Maine	32.2
New York	33
Alabama	30
Fond du Lac Band of Chippewa	60
California	23 (marine waters only)
Warm Springs Tribes	175

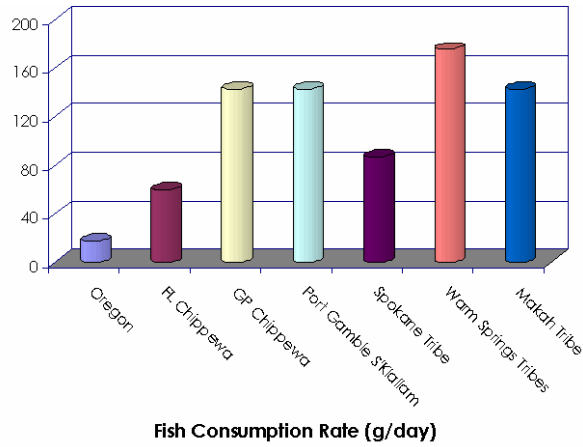
Relying on EPA Default Values

State/Tribe	Rate (g/day)
Grand Portage Band of Chippewa	142.4
Port Gamble S'Klallam	142.4
Spokane	86.3
Makah Tribe	142.4
Oregon	17.5
Washington	6.5

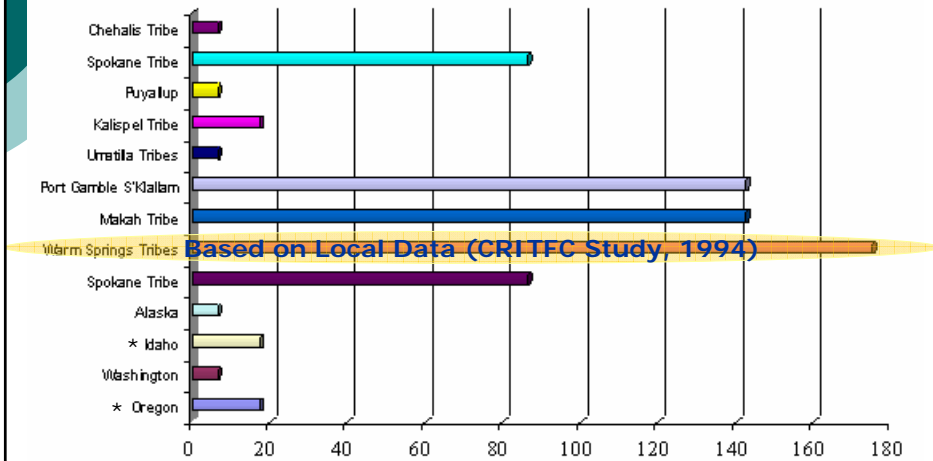
Example: States Using Higher Fish Consumption Rates for Some or All Waters



Example: Tribes Using Higher Fish Consumption Rates



Oregon's Current Fish Consumption Rate: Regional Comparison



* State adopted, but EPA has not yet acted on the revised criteria.

Summary: EPA's Guidance for Choosing Fish Consumption Rate

- Identify local fish consuming populations e.g. subsistence fishers, anglers, etc.
- Does data exist demonstrating the fish consumption rate(s) of these populations?
- EPA's #1 preference: use of local data (when available) for deriving a fish consumption rate.



Summary, Cont.

- Use default EPA rates where:
 - No known well defined populations with documented fish consumption rates higher than EPA's default rate and;
 - Default rate is believed to be representative.
- EPA strongly emphasizes that States/Tribes should consider developing criteria to protect highly exposed population groups.
- Bottom line- human health criteria must protect the designated use- fishing & fish consumption.

