FISH CONSUMPTION RATES IN HUMAN HEALTH CRITERIA

Second Rulemaking Meeting
Nov. 28, 2012
Recall from Our Oct 4\textsuperscript{th} Meeting

• Many factors go into calculating a criterion to protect our health
  • \textit{RfD/RsD}, Reference or Risk-specific Dose, i.e. ‘safe’ threshold
  • \textit{BAF}, Bioaccumulation Factor
  • \textit{BW}, Human Body Weight
  • \textit{DI}, Drinking Water Intake
  • \textit{FI/FCR}, Fish Intake/Consumption Rate
DEQ Reviewed 19 Surveys

- 1 was national (EPA 2002)
- 2 were local to Idaho, or had some Idaho data (ASTDR 1989, CRITFIC 1994)
- Remaining 16 were regional – that is AK, OR, or WA
- Six Surveys Scored 10 or Better in our Quality Review
Survey Quality Factors

1. Type of survey (e.g. angler or consumption)
2. Were methods reported
3. Was quality assurance/control discussed
4. Was survey representative of population surveyed
5. How did survey deal with seasonality
6. Details on fish species, source, and prep
7. Peer Review
Public Comments Received

• We had two comment deadlines:
  • Oct. 11th, 2012
    Should DEQ should proceed with rulemaking?
  • Nov. 7th, 2012
    Does DEQ have adequate data in available high quality studies?
Oct. 11th, 2012

Received comments from 12 parties

1. Christopher Mebane
2. Clearwater Paper Company
3. Columbia River Inter-Tribal Fish Commission (CRITFC)
4. Upper Snake River Tribes Foundation, Inc.
5. Idaho Association of Commerce and Industry (IACI)
6. J.R. Simplot Company
7. Nez Perce Tribe
8. Northwest Pulp & Paper Association
9. Kalispel Tribe
10. Northwest Food Processors Association
11. Federal Water Quality Coalition
12. Upper Columbia Tribes United
Summary of Oct. 11th Comments

• Overall in favor of proceeding with rulemaking
• Mixed on whether we needed more data
  • Be careful of survey bias
  • Be consistent across programs
  • Focus on high rate consumers
  • Don’t focus on high rate consumers
  • Adopt 175g/day now
  • Treatment of anadromous fish and market fish
  • Implementation along with criteria
  • Risk
Some Observations

• Risks are unequal

• Acceptable range of incremental cancer risk: $10^{-4}$ to $10^{-6}$ is what is recommended by EPA

• National data can be sufficient

• We are all part of the general population

• All existing data is relevant to a degree, needs to be considered
Nov. 7th, 2012

Received comments from 8 parties

1. Zannita Pongah
2. Greater Yellowstone Coalition
3. J.R. Simplot Company
4. Kalispel Tribe
5. Idaho Association of Commerce and Industry (IACI)
6. Clearwater Paper Company
7. Upper Snake River Tribes Foundation, Inc.
8. Northwest Pulp & Paper Association
Summary of Nov. 7th Comments

• 5 of 8 supported getting new fish consumption data

• Supporters differ on what additional data to get, who to survey

• 2 of 3 commenters suggesting we did not need new data, urged adoption of 175 g/day
Some Observations

• High and highest are not the same thing
• Protection is not black and white
• Neither is relevance of FC data black and white
• Defensibility of data is an issue
• Quantifying risk/protection is different than setting an acceptable level
• Request for detailed description of survey scoring criteria
DEQ has decided to pursue a fish consumption survey to collect new, Idaho-specific data.
An Ideal FC Survey…

- Provides the distribution of long-term estimates of consumption rates
- Accounts for seasonality
- Characterizes consumption for the general population as well as groups that consume at higher rates
- Identifies all sources of fish, by species
What is DEQ’s Plan?

• Design a survey that is broad in scope – all groups, all species, all sources

• With the requisite detail to parse information as may be needed after it is collected

• Settle policy questions while survey is planned and data is collected

• Contract design of survey and then its implementation
Policy Decisions in Using Fish Consumption Data for Regulations

1. Inclusion of fish consumers only or both consumers & non-consumers
2. Inclusion of whole population or targeted sub-population(s)
3. Inclusion of market fish
4. Inclusion of anadromous fish
5. Selection of a level of protection – what does it mean to be protected?
6. *Distributions or point estimates in calculation*
Potential Implementation Issues

- Legacy sources
- Cross boundary sources
- Criteria lower than we can measure
- Criteria lower than naturally occurs