

To whom it may concern,

I am writing on behalf of Citizens for a Clean Columbia and appreciate the opportunity to provide public comment on the document entitled “Fish Consumption Rates Technical Support Document: *A Review of Data and Information about Fish Consumption in Washington*”.

Overall, *consistency and clarity about the purpose of the document is needed*. For example, in the preface it is stated that the document will focus “specifically on the issue of how much and what types of fish are consumed by the people of Washington, and what data are available about fish consumption rates.” In the section on purpose in the executive summary, the document states that you will “compile and evaluate available information on fish consumption in Washington State” (also restated in chapter 1) but will not identify a fish consumption rate for use in a particular context. In the section on Fish consumption surveys in the executive summary the document states that “Statistical methodology used by the National Cancer Institute (NCI) was applied to the national survey data to better estimate long-term consumption rates using short-term dietary records” so this makes it seem like the purpose is to propose consumption rates.

At the same time in the preface, three questions are raised: “How should the data be combined in a statistically correct manner? Is it appropriate to establish a single default rate for use in multiple settings? and, How should salmon be included in the default fish consumption rate?” This leaves the reader expecting answers to these questions in this document.

Overall, there are excellent tables on strengths and weaknesses of different survey methodologies, both in general and specifically applying to the various surveys discussed. The size of the document is daunting and eliminating some of the redundancy would be helpful.

Specific comments with respect to the rest of the document are numbered below.

1. In the Executive Statement, problem summary, there is mention of past consumption rates used. While the document notes the basis of the 54 g (1.9 oz/day) rate (a 1981 anglers survey) it is not clear how the water quality standard fish consumption rate of 6.5 grams (0.22 ounce/day) was established beyond that the EPA completed technical evaluations. *A bit more information or a reference here would help or later in chapter 1. Clarifying the denominator here - total population and not fish consumers - is important.*
2. Executive Summary, WA fish resources, *the specific types of commercially and recreationally caught fish presented is incomplete and not easily understood by the public*. If this document is to be used by multiple groups, definitions of all of the types of fish considered by category (for example, which fish are groundfish?) are needed. For example, a footnote to Table 3 should be considered. I was surprised that the data presented were from the 2006 study. Is the 2010 citation not useful?
3. Executive Summary, WA fish consumers, *it seems that you can state with greater confidence that recreational fishers consume more fish than the general Washington population (omit may)*. This would make it clearer that different advisories may be needed for different populations of consumers.
4. Executive Summary, Fish consumption surveys, *the document should be modified to include the National Health and Nutrition Examination Survey (NHANES), National*

*Cancer Institute (NCI) results and the draft results of the RI/FS Recreational Consumption and Resource Use and Tribal Resource Use surveys issued after this work was completed.* It actually seems that the two former sources are used despite the footnote 8 in section 2.3.1 as section 4.2.2 notes use of these surveys and presents data in Table 19 from NHANES 2003-2006. NHANES likely provides better estimates of the total population, particularly because the CSFII surveyed low-income individuals. The applicability of NHANES data is highlighted in the discussion on p. 43 and in Table 20. The latter two provide the latest information from direct survey of the local population along the Upper Columbia River. Although this will delay the report, it seems that it is in the best interests of presenting a complete list of available data.

5. Chapter 1, 1.2, Table 2: *Please add meal size.* An important metric is meal size and not weight and the importance of visual aids is noted in section 3.4.5. In the Recreational Consumption and Resource Use Survey, for example, photographs were used to help people report on meal size that was then translated into weight. We believe this to be a far more accurate estimate than asking about weight although it is clear that weight is needed for risk estimates.
6. Chapter 3, 3.1, bottom p.21-22, *the document states “The fish dietary estimates for the U.S. general population estimates may provide fish consumption estimates for the general population in Washington” but the previous section clearly demonstrates that WA state has a higher consumption rate.* This seems contradictory.
7. In Chapter 3, 3.2.1, Table 9, *as another weakness, consider mentioning that it is not clear that the individual will consume all the fish present in the creel vs. feed neighbors or the dog for that matter.*
8. In Chapter 4, section 4.2.2 above Table 18, it is stated that “Currently, there are no fish dietary data available for the general fish-consuming populations in Washington State.” *Does this mean that there are no data from exclusively fish-consuming general populations or that NHANES and CSFII do not provide adequate information on Washington State fish consumers?*
9. *The daily consumption rates presented for tribal members on pages 46 and 52 seems low* (I did not find an adjusted g/day in the Squamish dietary data), particularly in light of the Harris and Harper (1997) report of a fish consumption rate of 540 g/day and a CRITFC mean fish consumption rate of 108 g/day noted on p. 45 for summer months (I think). I did finally find an explanation for this in footnote 30 but it would have been helpful to see this written in the text. The rate still seems low and may represent bias in study enrollment and certainly whether the denominator includes non-fish consumers.
10. Key findings 4.7 might be better placed at the beginning of the document.
11. Overall chapters 5 and 6 as well as the rest of the document illustrates the difficulties in surveying populations, defining a target population for advisories, and determining which consumption percentile from what population should be used for advisories. *We think that for the purpose of setting standards to use in fish advisories, the optimal denominator is fish consumers. Also, we think that different advisories are needed for different populations that could be tailored so as to increase relevance, cultural sensitivity, and awareness for these populations (State of WA general public fish consumers, anglers, and tribal populations).*

Sincerely, Mindy Smith, MD, MS; secretary for Citizens for a Clean Columbia