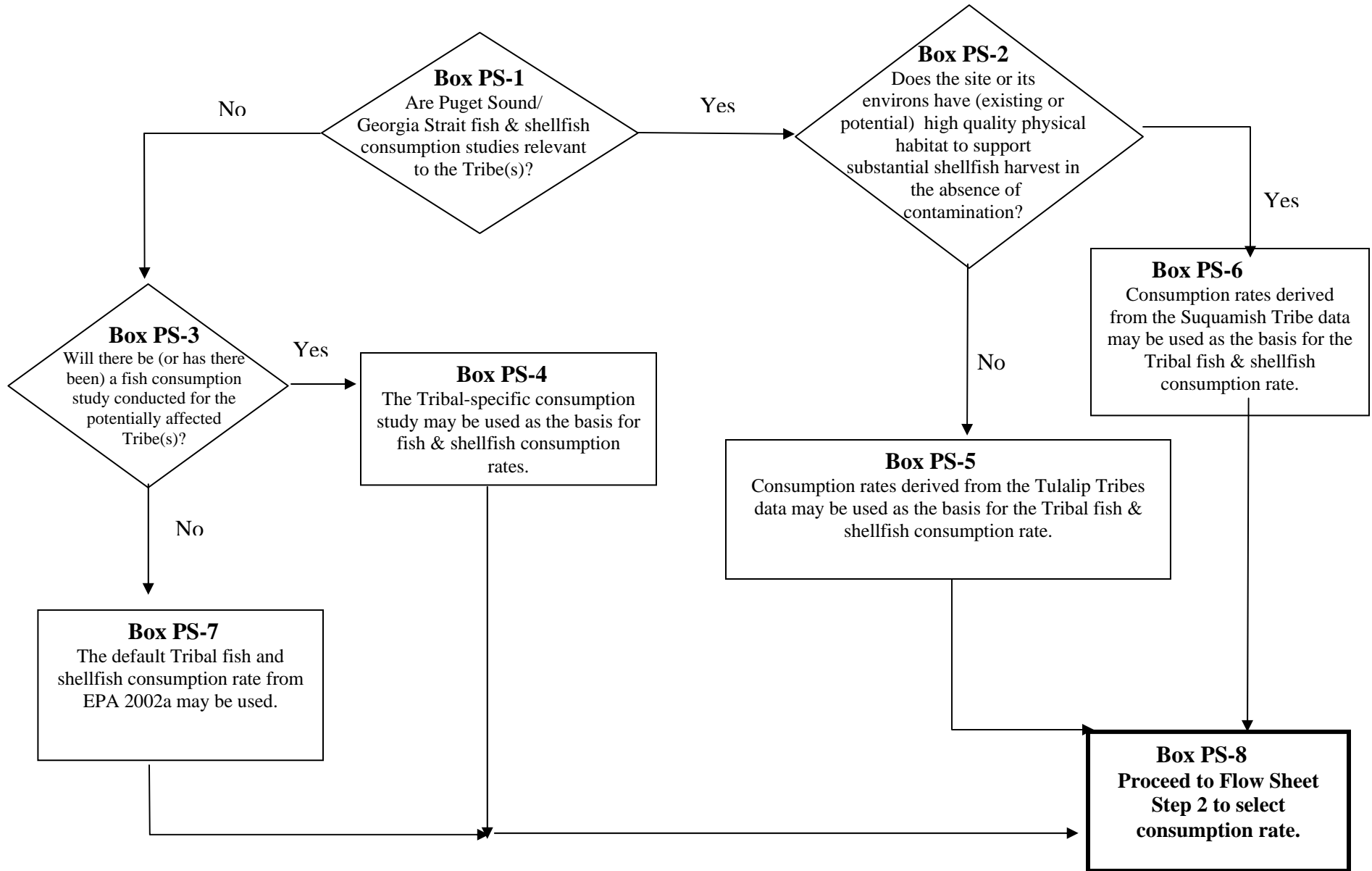


Puget Sound & Strait of Georgia Flow Sheet Step 1: Select Basis for Tribal Fish and Shellfish Consumption Rate



Step 2: Select Fish and Shellfish Consumption Rate

Box PS-9: Select fish and shellfish consumption rates corresponding to information source selected in Step 1

Data Source	Consumption Rate, g/day
Tulalip Tribes	194 ^a
Suquamish Tribe	767 ^a
EPA 2002a	216 ^b
Other Tribe-specific	^a

^a95th percentile consumer-only consumption rate for benthic, pelagic, anadromous and shellfish species caught in Puget Sound.

^b99th percentile consumer and non-consumer consumption rate for the general U.S. public, all finfish and shellfish.

Box PS-10: Select a mix of classes of fish and shellfish or representative species to reasonably represent Tribal consumption patterns, while holding constant the total consumption rate.

This task is not necessary where only a total consumption rate is needed, regardless of species. Types of fish may be grouped based on factors such as relative home ranges and available laboratory tissue analysis data.

- ◆ If a consumption study specific to the Tribe(s) is available and is applicable to the site location, the species-specific ratios for average consumption rates may be applied to the 95th percentile total consumption rate.
- ◆ Where the consumption rate is based on the Tulalip or Suquamish Tribal study, use the ratios of fish groups in Appendix A or best professional judgment, but do not change the survey-specific total consumption rate.
- ◆ For sites where the default consumption rate (EPA, 2002a) is used, decide whether to assume a species-specific ratio based on the Puget Sound Tribal studies or to develop site-specific, species-specific ratios. In general, the species-specific ratios reported in EPA 2002a are unlikely to be relevant to local Tribal consumption, because they are based on the types of fish and shellfish available and consumed throughout the country.

Boxes PS-11 & PS-12 reflect possible species-specific or contaminant-specific modifications

Box PS-11: Salmon

- ♣ Make decisions to include or exclude risks associated with consumption of salmon on a contaminant-specific basis. See Section III.D. for discussions of potential considerations for these decisions
- ♣ The criteria in Box PS-12 may be helpful in making contaminant-specific decisions for salmon.

Box PS-12: Additional contaminant and aquatic life issues.

This step may be used, if appropriate, to reduce estimated site-related risks from fish and shellfish consumption. A site-related contaminant may be eliminated as contributing to human health risks and hazards on a fish- or shellfish-specific basis if sufficient evidence demonstrates that it does not accumulate or is not otherwise present in the tissue when it is harvested; that it is present but the source of the tissue contaminant is unlikely to be related to the cleanup site; or that the contaminant's presence in the fish or shellfish tissue is not of concern to human health when consumed. In these cases, do not adjust consumption rates, but assign zero to the site-related risks for the specific contaminant or contaminant class for the specific fish/shellfish type or species.

Examples:

- ♣ The residence time in the vicinity of the site/site releases is too short for more than *de minimis* uptake of the contaminant into tissue of the fish type being evaluated.
- ♣ Fish tissue sampling for a contaminant demonstrates that the contaminant is absent on a species-specific basis.
- ♣ Literature exists indicating that the contaminant as found in specific fish or shellfish is not of concern for human health.
- ♣ Predictive modeling of contaminant tissue concentrations demonstrates no significant uptake of the contaminant occurs.
- ♣ Contaminant metabolism rate in the species is such that the contaminant is not of human health concern for consumption of the fish or shellfish.
- ♣ K_{ow} /water solubility effects on uptake, bioavailability and bioaccumulation in the species indicate that the contaminant is not of human health concern for consumption of the fish or shellfish type.

Contaminants also may be eliminated if determined to be likely to contribute only insignificant risks relative to other contaminants that are being evaluated.