



Maximum Daily Temperature for Mainstem Columbia River near Hood River, OR 2007-2009

Red line is Oregon Water Quality standard for Salmon and steelhead rearing and migration (68°F)

Optional text box:

- ❖ Salmon are happiest in 41-55 °F
- ❖ Temperature is a controlling factor for many biological reactions such as metabolism and respiration
- ❖ Many species regulate the timing of reproduction and migration based on temperature
- ❖ The Columbia River reaches temperatures that are lethal for salmon
- ❖ Salmon can survive ONLY if they have access to cold water
- ❖ Locating and protecting cold water refuges is critical to salmon survival

We're in Hot Water

Every summer water temperatures on the Columbia River climb dangerously high, reaching levels that put juvenile salmon, steelhead and other species at risk. Temperature is the most pervasive issue facing the Columbia River today, and it is arguably one of the biggest threats to the survival of salmon and steelhead.

Since 2006, Columbia Riverkeeper volunteers have been monitoring temperature on the Columbia River and its tributaries and the results are troubling. Water temperature is a critical factor influencing biological and chemical conditions in the environment, and the Columbia River is simply too warm.

To ensure salmon survival and to comply with state laws water temperature should remain below 68°F. However, the Columbia River regularly exceeds 70°F, putting salmon and steelhead under significant stress, reducing growth rates and putting them at risk to disease and predation. These high temperatures are a result of reduced flows, dams, loss of shade trees, and thermal pollution from municipal and industrial outfall, nuclear power plants and stormwater runoff.

Columbia Riverkeeper is working with our volunteers to identify, protect and restore cool water refuges that have become critical to the survival of salmon in the Columbia Basin.