Re: Rulemaking - Salmon Spawning Habitat Protection Rule, Chapter 173-201A WAC Water Quality Standards

Comments by Robert J Naiman Professor Emeritus University of Washington

This proposed rule change/addition is vitally important for maintaining salmonid populations in a healthy state. I strongly urge the commission to adopt the rule change/addition designed for maintaining acceptable oxygen levels within stream and river gravels. It is absolutely essential for assuring that the remaining salmonid populations have the conditions needed for successful reproduction.

As a professor at the University of Washington for over 20 years, it was a tenet of my classes in River Ecology and in Watershed Management – as well as in my research program – that adequate oxygen levels needed to be maintained in the gravels for the eggs and the newly hatched fry. Excess fine sediments effectively prevent the flow of surface water to the subsurface (hyporheic) zone and thereby not only compromise the eggs/fry but also the other organisms in that habitat. Excess fine sediments turn the gravels into "dead zones"; a zone that no longer functions as productive habitat for fish, insects, or beneficial microbes. Maintaining gravel substrates in a good ecological state is key to maintaining the overall productivity of streams and rivers.