

**Kenny, Ann**

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**From:** Katie Walter [KLW@shanwil.com]  
**Sent:** Friday, August 03, 2001 5:17 PM  
**To:** Kenny, Ann  
**Cc:** Stockdale, Erik  
**Subject:** fish/stream monitoring

I have some information on stream monitoring. Our fish guy, Richard Brocksmitth, was kind enough to arm me enough to make me dangerous.

Basically the IBI allows the biologist to see stream health changes over time. It does not address issues such as temperature, turbidity, channel morphology, substrate quality, or even fish use. He suggested that monitoring with IBI should be augmented with additional methods to address these other elements. Frequency for the IBI methodology he suggested was approximately 4 times per year through year 5 after construction, and then yearly until completion of the monitoring period. Baseline data must be obtained at least as frequently preconstruction .

As a condition perhaps we could say something like:  
In addition to the BIBI monitoring required above, the Port shall develop a monitoring plan that monitors at a minimum: temperature, turbidity, channel morphology, substrate quality, type and amount of large woody debris and other habitat features, riparian canopy cover, and fish use. Information gathered must be synthesized to determine how these elements may be impacting the overall stream health. Problems identified within the mitigation area must be immediately rectified. The monitoring frequency, locations (ie. which basins) and protocols shall be approved by Ecology prior to implementation.

The monitoring elements listed in here are the same as that list in the NRMP 4-22, with a few additions.

Okay  
that is it for now.....  
Katie

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