



Confederated Tribes and Bands  
of the Yakama Nation

Established by the  
Treaty of June 9, 1855

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February 6, 2012

Jim Pendowski  
Toxics Cleanup Program Manager  
Washington State Department of Ecology  
300 Desmond Drive SE  
Lacey, WA 98503

Re: Sediment Management Standards

Dear Mr. Pendowski,

Thank you for the opportunity to provide comments on Washington's draft Sediment Management Standards (SMS). Although the review time was rather limited, the Yakama Nation Fisheries Resource Management Program is submitting the attached technical comments on the draft SMS.

We understand that Ecology may revise the draft SMS based on comments received. In order for the Yakama Nation to provide comprehensive comments on the draft final SMS, Ecology will need to provide adequate review time.

Questions regarding the attached comments should be directed to McClure Tosch, the assigned staff to this matter. McClure Tosch can be reached at 509-865-5121 ext.6413 or [tosm@yakamafish-nsn.gov](mailto:tosm@yakamafish-nsn.gov).

Sincerely,

Paul Ward, Manager  
Fisheries Resource Management Program

## MEMORANDUM

**DATE:** January 31, 2011

**TO:** McClure Tosch, Yakama Nation Fisheries

**FROM:** Bill Beckley and Sherrie Duncan, Ridolfi Inc.

**SUBJECT:** Draft Comments to Washington State's Revisions to the Sediment Management Standards

The State of Washington is currently in the process of revising its Sediment Management Standards [SMS (WAC 173-204)], which are the state's regulations for identifying and cleaning up contaminated sediments. The SMS address cleanup of both marine and freshwater sediments. We have participated in Washington State Department of Ecology (Ecology) workshops held for the Sediment Cleanup Advisory Committee and public. The workshops were designed to provide a forum for discussion on Ecology's Draft Revisions to the Sediment Management Standards (WAC 173-204). Based on our review of the draft revisions, workshop materials, and participation in the workshops, we have identified the following initial concerns.

Overall, it should be noted that the timeframe for review and comment is fast-tracked and does not provide sufficient time for detailed review and consideration of the proposed revisions.

Additionally, there is a lack of information that is representative of freshwater sites located east of the Cascades, and the process seems to lack perspective from eastside stakeholders. Ecology appears to be relying primarily on a west of the Cascades perspective and westside datasets to revise the freshwater sediment portions of the standards. It is suggested that Ecology consult more directly with eastside stakeholders, and include more data from sites that are east of the Cascades.

### *Site-Specific Fish Consumption Rate*

To be protective of Yakama Nation tribal members and their resources, the SMS should support development of a higher fish consumption rate to include in the revised SMS. Additionally, the SMS should include language that supports the Yakama Nation (and others who consume large quantities of fish) in proposing site-specific fish consumption rates and exposure assumptions.

The proposed rule revisions indicate that for sites located within a tribal usual and accustomed fishing area, the reasonable maximum exposure scenario shall be based on tribal fish consumption rates. However, it is not indicated if the statewide default value (not yet decided) would represent a tribal consumption rate; if there would be a different, single tribal consumption



rate to be proposed; or if a site-specific tribal rate would be developed based on consultation with the Tribe(s) with treaty fishing rights at the site. While Ecology may approve a site specific fish consumption rate, the conditions, criteria, and procedures for developing a site-specific rate, or other tribal-specific exposure factors, are not detailed. Ecology should involve tribes in the development of guidance for developing and approving tribal specific exposure factors.

Note that if a human health cleanup level based on a tribal or default fish consumption rate is below background, Ecology would likely use background as a basis for setting cleanup levels, rather than a risk-based cleanup level.

#### *Natural and Regional Background*

The state's cleanup regulations include provisions that when a risk-based cleanup level would be lower than a "natural background" concentration of a chemical, the state may use the natural background concentration as the cleanup level. Additionally, the state is proposing the development of "regional background" concentration levels to address low level ubiquitous concentrations of hazardous substances. These regional background concentrations are expected to be greater than or equal to natural background and less than area background. How the state determines what is considered natural and regional background is likely to be part of their SMS update, and has already become a significant issue in Puget Sound. As the state moves toward using a higher fish consumption rate and revising the SMS, the pressure to rely on background concentrations to determine cleanup levels is likely to increase, and may outweigh any gains achieved by using a more appropriate consumption rate.

#### *Freshwater Sediment Quality Values*

Instead of using the apparent effects threshold (AETs) methodology that was used to develop the marine sediment quality values (SQVs) for the SMS (MacDonald et al., 2000), Ecology is using a floating percentile method (FPM) to develop freshwater SQVs. The FPM requires input of data to run as a statistical model. One of the predominant datasets used for the FPM was derived from Lake Roosevelt, a water-body heavily influenced by mining and characterized by sediments with high levels of metals. By using this dataset, several values for metals were developed that may not be protective of freshwater benthic organisms, specifically the values for copper, lead, zinc, and arsenic. The SQVs developed for these metals are generally one order of magnitude higher than the freshwater AETs. Ecology should reconsider using the freshwater AETs and/or the datasets that were used to run the FPM. Ecology should not rely on datasets from sites dominated by mining to develop cleanup standards for non-mining sites.

#### *Source Control*

Source control and recontamination is a big issue. How will Ecology address the recontamination of remediated sites? How will Ecology address contamination in rivers moving through the system and recontaminating downstream sites and estuaries? Several sediment quality standards and cleanup screening levels are higher for freshwater sediments than marine



sediments. Ecology should provide more information on how these issues will be considered and what efforts will be made to address source control.

#### *Sediment Management Areas*

Reference areas are required to define sediment management areas. It is difficult to identify reference areas for freshwater sites. Numerous freshwater sites, such as those in the Upper Columbia River, are characterized by sediments that have been impacted by mining activities. Ecology should provide more information on how these issues will be considered when developing sediment management areas.

#### *Sediment Standards Based on Human Health*

The human health risk assessment framework is confusing, as it now appears to include upper and lower risk thresholds, although the conditions when you would apply those risk thresholds are not well defined. The footnotes indicate that the upper human health risk level is still under consideration, and that Ecology is in the process of drafting guidance for conducting human health risks assessments at sediment sites. The existing risk thresholds included in the Model Toxics Control Act (MTCA), should be maintained, and the SMS revisions should not allow cleanups based on less stringent human health risk standards.