Sediment Transport Analysis in the Stillaguamish River

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Following the Oso Landslide, large amounts of sediment were deposited into the North Fork Stillaguamish River, which could potentially have a significant impact on the river's flow. Through this project, we aim to gain a further understanding of how this increase in sediment deposition will affect the river flow and the local salmon population. This will be done by taking soil samples from the riverbank and using them to model the sediment transportation. The modeling will be done with the use of Dr. Lauer's unpublished numerical modeling program, Morphodynamics and Sediment Traces in One Dimension (MAST-1D). It is our goal that not only will we be able to determine whether the effects of this sediment transportation are negative, positive, or neutral, but also that our findings can be used as a tutorial for Dr. Lauer's program once it is published.