

Reviewing Official
Region 6 Regional Forester
Pacific Northwest Region
USDA Forest Service

May 17, 2023

Attn: 1750/1950 Objections
1220 SW 3rd Avenue
Portland, OR 97204

Re: North Fork Stillaguamish Landscape Analysis Draft Decision

Reviewing Official,

I object to this proposal for the following reasons:

1. The proposal falls short of supporting information justifying the actions. See my comments of May 14, 2023 and references provided.
2. It has been documented that similar actions have resulted in associated inter-gorges failing, channels flushing, spawning gravels being buried with sediments and elevated water temperatures. This project's objectives can be better achieved by other methods, as explained below. Also see my comments of May 14, 2023.

The harvesting strategy as proposed is clear-cutting and will result in large open areas where there is no canopy to protect against storm waters from rain-on-snow events. This is the Parking-Lot-Effect. Instead, selective thinning to the extent that the canopy can close over in less than 5 years prevents this. The goal must be the retention and storage of water reducing peak flow runoff and reducing the effect of summertime drought conditions. The area considered for this timber sale is already under the ESA federal listing of threatened species for the NF Stillaguamish Chinook (1998), Steelhead Trout (2003) and Bull Trout (1999) which requires that no measures be taken that worsen the situation. The secondary effect is more sediment into the Oso area, the site of a tragic landslide.

It is better to avoid any activity in riparian areas due to the unstable nature of the soils in the banks. The consequences of action in riparian areas have been documented in the Watershed Analysis Finney Creek/Lower Skagit River (1999) and Edie, J. (1990), A 48-Year Sediment Budget (1942-1989) for Deer Creek Basin, Washington. According to Paulson (1996), forest practices were associated with most (66%) of the failures in Finney Creek. The remaining 34% of the failures occurred in mature timber, which suggests that the basin is naturally prone to mass wasting, as well as being sensitive to forest practices. The proposed North Fork sale area is adjacent to Finney Creek and has similar soil conditions.

In terms of natural characteristics, failures in Finney Creek (watershed adjacent to North Fork Stillaguamish) are most related to streams, fault contact zones, phyllite zones, and inner gorges. In Paulson's study (1996), a high percentage of all failures (64%) originated in inner gorges.

In terms of disturbances, sediment-producing failures in Finney Creek are more related to clear-cut harvest than to roads. This is particularly true where riparian harvest has occurred; most sediment

impacts in lower Finney Creek originate from impacted riparian areas. Finney is adjacent to North Fork Stillaguamish and also part of the FS Adaptive Management Area.

These failure relationships are also generally applicable in other sub-watersheds within the analysis area. The tributaries contributing the most sediment (Quartz Creek, Hatchery Creek, Ruxall Creek, and stream #0409) have been heavily harvested, and have included significant harvest within riparian areas.

Clear-cut areas collect water, and can extend the influence of rain-on-snow events. High-elevation harvest completed in the mid-1970's was followed by a surge of sediment delivery events in the early 1980's.

Edie (1990) found similar finding to Paulson's in Little Deer and Deer Creek.

Sincerely,

Roger Nichols

Roger Nichols

Edie, J. 1990. A 48 Year Sediment Budget (1942-1989) for Deer Creek Basin, Washington. M.S. Thesis, Western Washington University, Bellingham, Washington. 122 pp.

Parks, D.S. 1992. A Landslide Inventory of the Finney Creek Watershed, Skagit County, Washington. M.S. Thesis, University of Washington, Seattle, Washington 164 pp.

Paulson, K. 1996. Estimates of Land-use Effects on Sediment Supply in the Finney Creek Watershed, Skagit County, Washington. Prepared for the Skagit System Cooperative and submitted in partial fulfillment of U.S. Forest Service Cost Share Monitoring Agreement #CCS-94- 04-05-01-050. College of Forest Resources, AR-10, Univ. of Washington, Seattle, WA. 32pp.

Paulson, K. 1997. Estimating changes in sediment supply due to forest practices: a sediment budget approach applied to the Skagit River basin in Northwestern Washington. M.S. Thesis. College of Forest Resources, Univ. of Washington. 72pp.

Peak Northwest, Inc. 1986. Nooksack River Basin Erosion and Fisheries Study: Boulder Creek, Canyon Creek, Cornell Creek, Howard Creek, and Racehorse Creek, Whatcom/Skagit Counties, Washington. Washington State Department of Ecology, 205 J Grant.

The above references were correlated to Snyder and Wade Mt Baker Soil Inventory and found high degree of correlation in soil type prone to failure from timber harvest practices and poor road drainage.