MEMORANDUM

January16, 2000

To: **Jay Carlson**

Frm: **Dan Couch & Watershed Analysis Team**
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Subj: **Comparison of Differences Between North Bank Habitat Management Area/ACEC Final Environmental Impact Statement and Watershed Analysis North Bank WAU for incorporation into future iterations of watershed analyses.**

The first iteration of watershed analysis (WA) that encompassed the boundary for North Bank Habitat Management Area/ACEC (NBHMA) was completed in January, 1997. It was called the Watershed Analysis North Bank WAU. That analysis covered approximately 9,338 acres and included three 7th field drainages in their entirety and a small portion along the northern and northwestern ridge line, all of which are part of the Lower North Umpqua 5th field watershed. A very small portion (estimated at less than 40 acres) along the northeast portion falls into the Calapooya 5th Field Watershed. A WA for the entire Calapooya 5th Field Watershed was completed in October, 1999. The NBHMA contains approximately 6,580 acres.

The NBHMA, Final Environmental Impact Statement (FEIS), completed September, 2000, contains more specific analysis of conditions within the 6,580 acre boundary of NBHMA. There are some differences between the data and analysis of the North Bank WAU and the NBHMA FEIS. The FEIS provides a stronger analysis because it derives its conclusions based to a greater extent on field data. It is also expected that if any of the restoration in the NBHMA FEIS is implemented, there will be resulting changes in watershed processes. Because the FEIS analyzes the entire NBHMA, any differing information from the FEIS will supplant the North Bank WAU and will be incorporated into future iterations of watershed analysis. Some of the differences between the North Bank WAU and the NBHMA FEIS include the following and are described in greater detail below:

-Soil compaction
-Sedimentation within streams and channel morphology
-Road densities and problem areas associated with roads related to sedimentation
-Cattle grazing effects on riparian habitat
-Fish distribution
-Land use allocations

<u>Soil Compaction</u>

North Bank WAU, pages 5-6, 6-3 vs NBHMA FEIS pages 53, 67-68, 77

The WA gave general descriptions of soil compaction as the assumed result of past grazing and the timber related road use. The FEIS provided quantified data on the amount and extent showing a lack of overall soil compaction within the the NBHMA boundary.

Sedimentation Within Streams and Channel Morphology
North Bank WAU, pages 5-6, 6-3, 6-4 vs NBHMA FEIS page 68

The WA gave general descriptions about sedimentation and stream channel morphology with opinions about what caused current conditions. The FEIS provided a sediment budget with data on the amount and extent of sediment related problems.

Road Densities and Problem Areas Associated with Roads Related to Sedimentation
North Bank WAU, pages 5-6 through 5-8, 6-15, 6-16 vs NBHMA FEIS pages 66-67, 19, 26

The WA gave general descriptions about road related sedimentation but gave a more detailed map and assessment of road related problems. The FEIS quantified the extent of road related problems as well as the amount of sediment delivered. It also provided a similar detailed road map and assessment with specific prescriptions to correct the problems.

Cattle Grazing Effects on Riparian Habitat
North Bank WAU, page 6-2 vs NBHMA FEIS pages 119-121

The WA gave general descriptions about the negative effects on riparian habitat from intense cattle grazing. The FEIS gave a more quantified assessment of how varying intensities of grazing can influence riparian habitat.

Fish Distribution
North Bank WAU, pages 7-1, 7-4 vs NBHMA FEIS pages 70, 74

The WA gave fish distribution based on observational estimates. Upon field review, the FEIS provided fish distribution based on site specific, year 1999 and 2000 survey data.

Land Use Allocations
North Bank WAU, pages 1-5, 1-6 vs NBHMA FEIS pages 7, 24

The WA similarly described the 400 acres set aside for timber production as previously described in the Exchange EA. The FEIS quantifies and describes more succinctly where that acreage would occur within the NBHMA.