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March 18, 2009

Matt St. John
North Coast Regional Water Quality Control Board
5550 Skylane Blvd, Suite A
Santa Rosa, CA 95403
mstjohn@waterboards.ca.gov

RE: Comments on the North Coast 2008 Integrated Report for the 303(d) List of Impaired Waters

Dear Mr. St. John,

The Karuk Tribe's Aboriginal Territory covers approximately 100 miles of the mid-Klamath River, the Salmon River watershed, and many minor tributaries. The health of the Klamath watershed is imperative to the health of the Karuk people. Our ceremonies are site-specific and require clean water, access, and a healthy River ecosystem. The whole watershed must be healthy to be functional for the Karuk people. This includes not only the watershed within Aboriginal Territory but also upstream and surrounding areas. Please accept the following comments on the 2008 303(d) listing for the Klamath River, Wooley Creek, Shasta River, and minor tributaries within the Klamath Basin.

Decision ID 9540: Delist Wooley Creek for temperature

We **oppose** the recommendation to delist Wooley Creek for temperature from the 303(d) list. Even though a large portion of the Wooley Creek watershed is designated as a wilderness area now, it is and has been impacted and disturbed by human activity. There is active management occurring in over 15% of the watershed.

There are two grazing permits for the Wooley Creek watershed. One is managed by the Klamath National Forest and the other is managed by Six Rivers National Forest. Grazing of cows has an impact on water quality. Examples of this include reduction of riparian vegetation, destabilization of hillslopes in delicate headwater areas, increased introduction of E. coli into the water system, and spreading of nonnative plant species.

The entire Wooley Creek watershed is impacted by poor fire management and over 95% of the watershed has been burned in the last few years. Fire suppression and lack of traditional

management practices have led to devastating fires and a reduction of species and habitats critical to a healthy ecosystem. These events culminated at Medicine Mountain in the Wooley Creek watershed during the summer of 2008. In 1994, fires on Medicine Mountain took down stands of tan oak trees. Tan oak acorns are an important subsistence food for the Karuk people. Traditional fire management that occurred prior to contact included active management of the watershed. Traditionally, the fallen debris would have been cleaned up. This practice reduced ladder fuels, so that consequent fires would burn slow with beneficial effects. However, due to poor management practices, the fuel was not cleaned-up. When a fire went through the same area in 2008, it was catastrophic. Because of the unmanaged fuel load, the area burned so hot that it turned the area into "moonscape". Important habitat was destroyed including beautiful tan oak stands and medicinal princess pines.

Water temperatures in Wooley Creek exceed the EPA criteria for protection of moderate to high density summertime salmon and trout juvenile rearing. We requested and received data from Six Rivers National Forest for lower Wooley Creek. The data set was from 7/6/2006-10/9/2007. A 7-day average of daily maximums (7DADM) was calculated for this data set. The EPA criteria listed in the Wooley Creek Fact Sheet for LOE ID 26643 was a 16 C 7DADM. Of the 445 calculations, 157 exceeded the EPA criteria. For the data provided, this occurred between July and September for both 2006 and 2007 (Figure 1). Therefore, temperatures in Wooley Creek are not protective of juvenile salmonids during the hot summer months.

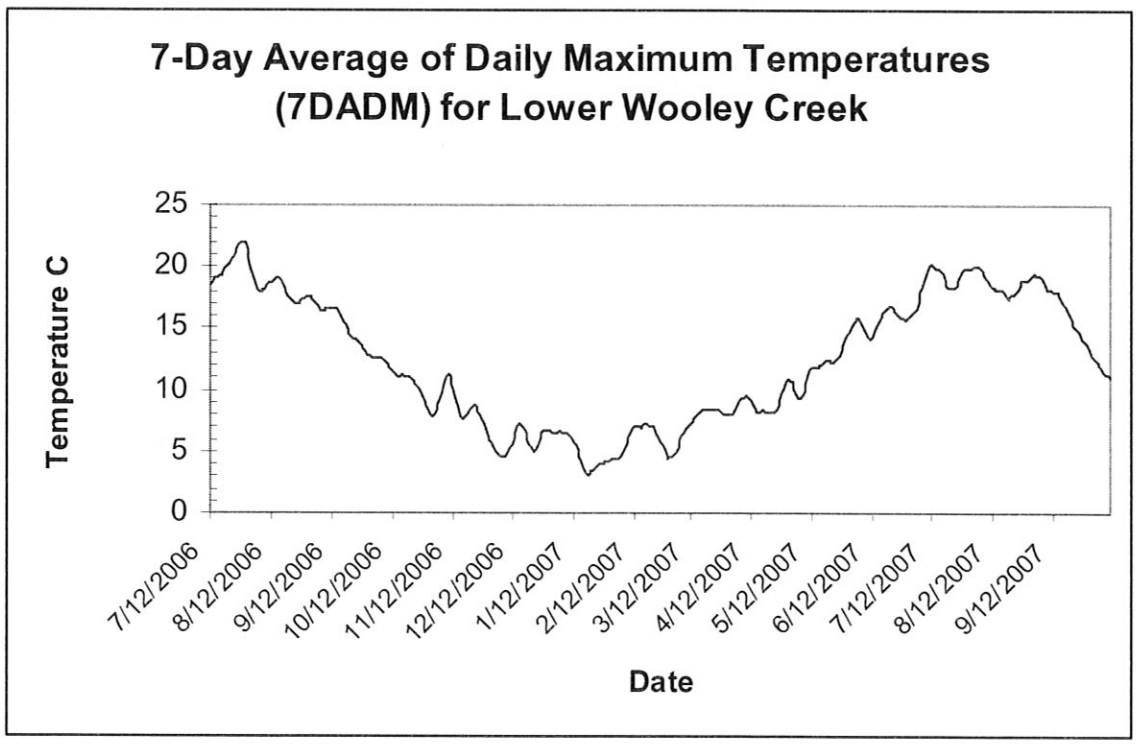

Figure 1. 7-day average of daily maximum temperature for lower Wooley Creek. Calculations were done by Karuk Tribe Water Quality. Data was provided by Six Rivers National Forest.

Decision ID 13974: List Mainstem Klamath River from Iron Gate to Scott River for cyanobacteria hepatotoxic microcystins AND Decision ID 13971: List Mainstem Klamath River from Scott River to Trinity River for cyanobacteria hepatotoxic microcystins

The Karuk Tribe **supports** the decision to list the mainstem Klamath River for microcystins. The mainstem Klamath River can be polluted by the toxigenic hepatotoxin microcystin during the hot summer months, particularly in August and September. Being in the water during these months is not an option for the Karuk people. Critical ceremonies occur during this time period that require bathing in the River water. Traditionally, medicine men drank the River water. This is also the time of year when Karuk fishermen are in the River for subsistence fishing. Since they still practice the traditional style of dipnet fishing, it requires them to spend long hours in backwaters and eddies, where the blooms are likely to be the most toxic. Mussels in the River were shown to be toxic and unfit for human consumption as cited in your fact sheets LOE ID 25846 and 25847. Mussels are an important subsistence food for the Karuk people. The effect of microcystin on other Tribal Trust species is still undetermined and needs to be studied. It is imperative that the microcystins be eliminated from the Klamath River to protect Cultural Use and Subsistence Fishing beneficial uses.

To be protective of beneficial uses, the Klamath River should be listed for not only microcystin but also the toxigenic cyanobacteria *Microcystis aeruginosa* that produces microcystin.

Decision ID 9638: List Lake Shastina for Mercury

We **support** the recommendation to list Lake Shastina for Mercury. Mercury contamination is a very important public health issue. Lake Shastina is used as a drinking water supply, for water contact recreation, and for recreational fishing. All of these beneficial uses are severely impacted by the presence of mercury in the system.

Decision ID 13197: List Klamath River from Beaver Creek to the Scott River for Sediment AND Decision ID 13198: List Klamath River from O'Neil Creek to Elk Creek for Sediment

We **support** the recommendation to list the Klamath River for sediment in the proposed reaches. However, the Klamath River and associated tributaries should **also** be listed for sediment from the Scott River to O'Neil Creek and from Elk Creek to the Trinity River for sediment. There are very few watersheds from Beaver Creek to Trinity River that are not impacted by land management. Several factors may affect sediment transport and deposition in watersheds including roads, logging, mining, and fire management practices. In particular, any watershed with roads and/or the occurrence of catastrophic fires should be included in the listing. Of all the tributary watersheds between Beaver Creek and the Trinity, only Fort Goff and Portuguese Watersheds could be exempted from the listing.
Examples of road failures and catastrophic fires are found in watersheds between Elk Creek and the Trinity River. An example of roads negatively effecting watersheds is Rock Creek which is upriver of Somes Bar. Road failures led to a huge slug of sediment that effectively blocked fish passage into the creek except for the lower ½ mile. An example of catastrophic fire damage by poor fire management practices is found at Dillon Creek. A huge fire burned

through Dillon Creek in summer 2008. During a storm event in March 2009, Dillon Creek was transporting noticeable sediment into the Klamath River (Figure 2).

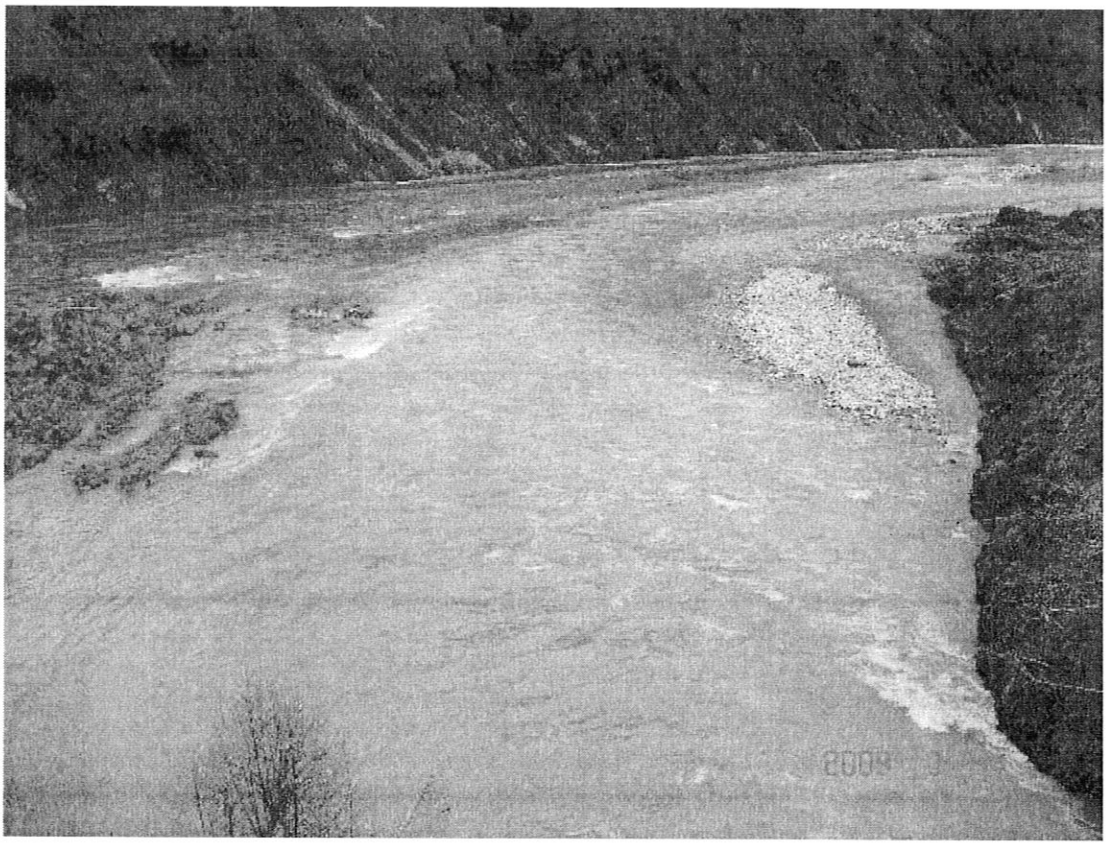

Figure 2. Photograph of the confluence of Dillon Creek (foreground) and Klamath River during a storm event in March 2009. Photograph was taken by A. Corum, Karuk Fisheries Biologist March 16, 2009.

For questions regarding the technical comments, please contact Susan Corum, Water Quality Coordinator scorum@karuk.us.

Sincerely,

Leaf Hillman

Vice Chairman Karuk Tribe