From: Mike Miles [mmiles@hrcllc.com] Sent: Wednesday, September 26, 2012 6:24 PM To: Gentry, George; Huff, Eric Cc: Dias, Matt Subject: RE: Class II-L background request Well...since you asked-

There is an apparent assumption by some that the ASP Rule Class II-Standard Protection measures are inadequate to control water temperature and in-stream sediment transport even under low flow/narrow channel (<5') conditions, including sub-surface flow (presumably 100% subterranean shade) conditions. Are any of you, or perhaps Cafferata or Coe aware of scientific findings addressing, supporting, or refuting this concern? Seems like Cajun James or someone did some fairly intensive applied studies on this matter (at least the temperature element)... but if not, or if findings remain inconclusive, we should consider having the BOF Research and Science Committee or MSG address these basic question through applied science if they are not already.

My impression is that many of the studies referenced regarding appropriate stream buffer measures were based on studies conducted for headwater streams, which despite being referred to as 'small headwater streams', were in fact larger than those at the heart of our current discussion. For example, Zwieniecki and Newton (1999) references low gradient streams averaging *10 feet in width and 0.5 cfs* – which no one is arguing would not meet the Class II-L standard. Sullivan et al (1990) is referenced in regard to study of 'larger streams'... Both of these studies were referenced in the ISOR for Class II-L. I am curious if anyone has looked at the actual average channel widths at the basis of the studies cited and discussed in SWC's scientific literature review? If not is that something we could have Pete or someone look into?

At the heart of this, scientifically anyway, is a question seemingly as simple as: does a 100' wide Class II-L WLPZ actually provide more shade <u>to a small stream (\leq 5') channel</u> than the Class II-S WLPZ to the extent that there is a measurable difference in water temperature (say >0.5 C°)?

A few other questions that would be good to have answered in preparation for pending discussion include:

- 1. What is the effect of surface flow going sub-surface on water temperature (I think I know the answer but would like to hear a scientist perspective or see reference to some studies if they are out there)?
- Based on a reasonable sample of 2010-2012 THPs/NTMPs from both the coast and interior, What percentage of Class II watercourses connected to a Class I watercourse are currently being classified as Class II-L? I have heard that DFG had a target in mind they expected to come out of this Rule.
- 3. Again based on a sample, what is the mean drainage area of designated Class II-L watercourses to date and what does the range of drainage areas look like when plotted? Would also be interesting to see this data in an interior v. coastal comparison format.

These are some of the scientific and regulatory questions I arrive at in considering this matter and listening to the perspective of others. Anything you can do to shed some light on any of this might benefit the Board and interested parties in future discussion.

Thanks Mike From: Gentry, George [mailto:George.Gentry@fire.ca.gov]
Sent: Monday, September 24, 2012 3:36 PM
To: Mike Miles; Huff, Eric
Cc: Dias, Matt
Subject: RE: Class II-L background request

Is that all the things you needed?

George (YG) Gentry Executive Officer Board of Forestry and Fire Protection Office: 916-653-8007 Cell: **Redacted**

From: Mike Miles [mailto:mmiles@hrcllc.com]
Sent: Monday, September 24, 2012 3:29 PM
To: Gentry, George; Huff, Eric
Cc: Dias, Matt
Subject: RE: Class II-L background request

Great - thanks YG.

From: Gentry, George [mailto:George.Gentry@fire.ca.gov]
Sent: Monday, September 24, 2012 3:22 PM
To: Mike Miles; Huff, Eric
Cc: Dias, Matt
Subject: RE: Class II-L background request

http://www.bof.fire.ca.gov/board_committees/forest_practice_committee/current_projects/

George (YG) Gentry Executive Officer Board of Forestry and Fire Protection Office: 916-653-8007 Cell: **Redacted**

From: Mike Miles [mailto:mmiles@hrcllc.com]
Sent: Monday, September 24, 2012 3:20 PM
To: Huff, Eric
Cc: Gentry, George; Dias, Matt
Subject: Class II-L background request

Hi Eric

Could you please send me a copy of original 2009 ASP rule Notice of Rule Making package for the ASP WLPZ rules along with the Initial and Final Statement of Reasons leading up to the Boards adoption of the comprehensive ASP Rule package in September 2009? I couldn't find it on the BOF website nor among the materials previously provided earlier this year.

Thanks, Mike

I have CC'd Matt and YG in the event that you are not available.

Michael W Miles Office (707) 764-4173 Mobile **Redacted** mmiles@hrcllc.com