

18 December 2013

Bill Stalzer  
Stalzer and Associates  
603 Stewart Street, Suite 512  
Seattle, WA 98101

**Re: Proposed Shoreline Jurisdiction for Walla Walla Regional SMP**

Dear Bill:

This summary of Proposed Shoreline Jurisdiction is in follow-up to our letter to you dated 25 October 2013 which discussed the “preliminary” shoreline jurisdiction for the Walla Walla Regional Shoreline Master Program Update. Based on additional review of recent stream gage data, physical characteristics, and local professional opinions, we are offering our assessment of whether Whetstone Hollow Creek, Coppei Creek and Yellowhawk Creek should be considered Shorelines of the State.

As previously noted in our October 25 letter, the preliminary shoreline jurisdiction was determined based upon the upstream point where the mean annual flow is 20 cubic feet per second (cfs) for all downstream areas. The upstream 20 cfs point is based on a 2003 study by USGS<sup>1</sup> provided by Ecology

#### **Whetstone Hollow Creek**

Whetstone Hollow Creek is a tributary to the Touchet River, joining the Touchet just west of the City of Prescott. Per the USGS (2003) study, the 20 cfs mean annual flow point is located approximately 3 miles upstream, just northeast of the Prescott city limits where a small tributary joins the creek. No gage data is available for Whetstone Hollow Creek.

I conducted a site visit on 12 November 2013 and observed Whetstone Hollow Creek at the bridge along Hwy 124, just west of the City of Prescott (Figures 1 and 2), and at the bridge along Skyrocket Road (Figure 3) which is approximately ½ mile west (downstream) of the USGS modeled 20 cfs point. At the time of my site visit, I estimate that water was flowing at less than 0.5 cfs.

Whetstone Hollow Creek can be characterized as a narrow grass lined channel with a channel width typically varying from 1 to 3 feet at the points of observation. Input from several local residents familiar with Whetstone Hollow Creek, including Chris Hyland from the Walla Walla

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<sup>1</sup> <http://pubs.usgs.gov/wri/wri034042/pdf/wri034042.pdf>

Watershed Management Partnership, indicates that the channel is dry for much of the year. Based on my site observations, local input and comparative flow data from nearby streams (e.g. Coppei Creek), it is highly unlikely that Whetstone Hollow Creek meets Ecology's 20 cfs mean annual flow requirements and therefore should not be considered a Shoreline of the State.



Figure 1: Whetstone Hollow Creek looking east (upstream) from Hwy 124 bridge west of Prescott.



Figure 2: Whetstone Hollow Creek looking southwest (downstream) from Hwy 124 bridge west of Prescott.



Figure 3: Whetstone Hollow Creek looking east (upstream) from Skyrocket Road bridge near Prescott.

### **Coppei Creek**

Coppei Creek is a tributary to the Touchet River, joining the Touchet River just west of the City of Waitsburg. Coppei Creek was not included in the USGS (2003) study as a stream with a mean annual flow greater than 20 cfs. However, based on local input and the presence of periodic stream gage data, further investigation was warranted to verify the USGS study.

I conducted a site visit on 12 November 2013, accessing Coppei Creek just east of Hwy 12, near the intersection of McCown Road and Coppei Road (Figure 4). This is approximately 2.5 miles downstream from the confluence with the north and south forks of Coppei Creek. At the time of my site visit, I estimate that water was flowing less than 3 cfs.

Stream flow data has been collected on Coppei Creek by the Washington Department of Ecology for a 9 ½ year period from Dec 2002 to April 2012 at a gage station located near its mouth (Station 32G060). Additional stream flow data at this location was provided by the Walla Walla Basin Watershed Council for the recent 2012-2013 water year (WY). Per this data record, mean annual flow in Coppei Creek varied between a low of 10.2 cfs (2004-2005 WY) to a high of 24.1 cfs (2010-2011 WY), with an overall mean annual flow of 17.5 cfs. There are periods of missing data in this record, both during low and high flow events, resulting in an average of 341 data points per year. Figure 5 displays the average daily flow values over the entire period of records (nearly 11 years).

Per this evaluation of the stream flow record and my site evaluation, Coppei Creek does not meet the 20 cfs mean annual flow threshold to be considered as a Shoreline of the State. Chris Hyland of the Walla Walla Watershed Management Partnership, who is familiar with Coppei Creek, also supported this assessment during a meeting on 12 November 2013.



Figure 4: Coppei Creek looking south (upstream) from McCown Road bridge south of Waitsburg.

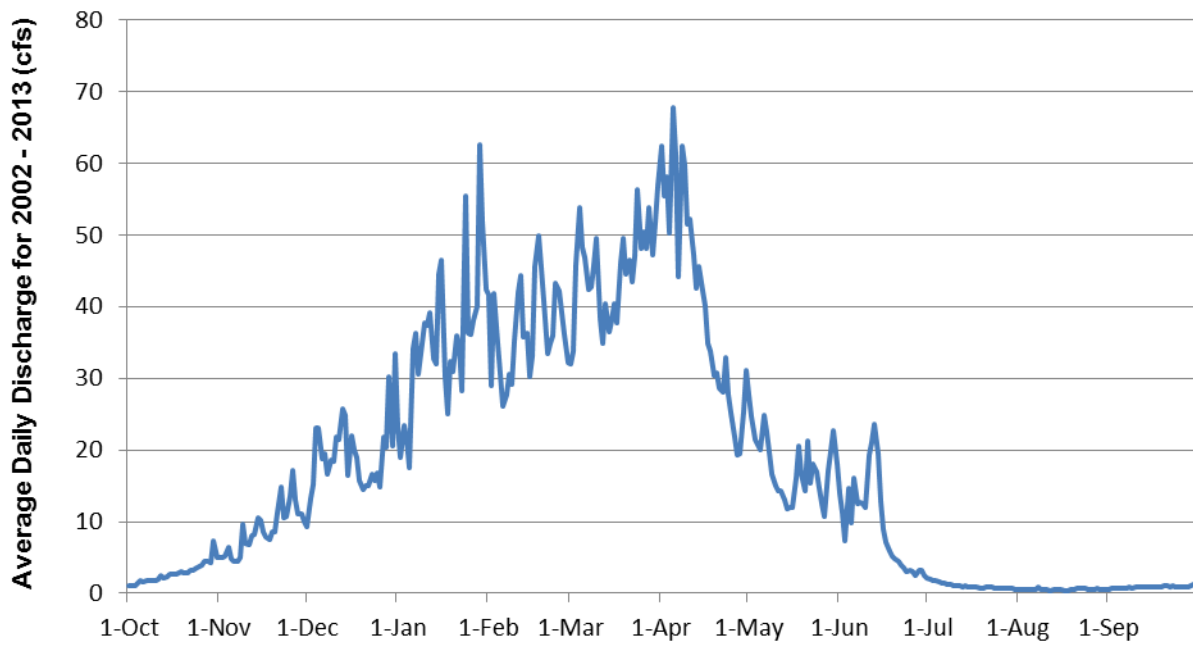


Figure 5: Coppei Creek average daily discharge (cfs) near mouth

### **Yellowhawk Creek**

Yellowhawk Creek is a tributary to the Walla Walla River, joining the Walla Walla River just west of Old Milton Hwy. Yellowhawk Creek originates as a distributary of Mill Creek at the U.S. Army Corps of Engineers' (Corps) operated diversion structure located just south of Walla Walla Community College. Yellowhawk Creek was not included in the USGS (2003) study as a stream with a mean annual flow greater than 20 cfs. However, based on local input and the presence of recent stream gage data, further investigation was warranted to verify the USGS study.

I conducted a site visit on 13 November 2013, accessing Yellowhawk Creek at the confluence with Cottonwood Creek north of Old Milton Hwy and east of Hwy 125 (Figure 6). This is approximately 2.1 miles upstream from mouth of Yellowhawk Creek. At the time of my site visit, I estimate that water was flowing less than 5 cfs in Yellowhawk Creek downstream from the Cottonwood Creek confluence. Contributing flow from Cottonwood Creek appeared nearly equal to that of Yellowhawk Creek (i.e. approximately 2-3 cfs).

Information provided by Chris Alford, Mill Creek Park Ranger for the Corps (pers. comm. November 15, 2013), noted that through a Memorandum of Understanding with the Washington Department of Ecology, the Corps is to operate the Mill Creek diversion gate to a height of 0.9 feet. Per the USGS rating curve, this equates to a stream flow of 17.83 cfs. Mr. Alford also noted that this gage location is at the Second Division Works where Garrison Creek splits off from Yellowhawk Creek along Reservoir Road. Downstream of the Garrison Creek diversion structure, three tributaries enter Yellowhawk Creek. These include Caldwell, Russell, and Cottonwood Creeks, with the latter entering Yellowhawk the furthest downstream. No flow data has been found for any of these three tributaries of Yellowhawk Creek.

Stream flow data has been collected on Yellowhawk Creek by the Walla Walla Basin Watershed Council for the past 3.5 years (May 2009 to September 2013) at a gage station located approximately 1,000 feet upstream from its confluence with the Walla Walla River. Per this data record, mean annual flow for Yellowhawk Creek near its mouth varied between a low of 30.8 cfs (2012-2013 WY) to a high of 53.5 cfs (2010-2011 WY), with an overall mean annual flow of 39.1 cfs. Figure 7 displays the average daily flow values over this 3.5 year period. The Washington Department of Ecology also operates a stream flow gage on Yellowhawk Creek near its mouth. However, this gage only collects water flow during low flow periods.

Per the evaluation of the stream flow record taken near the mouth of Yellowhawk Creek and my site evaluation, it appears that the lower portion of Yellowhawk Creek may meet the 20 cfs mean annual flow threshold to be considered a Shoreline of the State. Based on the information provided by the Corps regarding the operation of the Yellowhawk Creek diversion structure, it is unlikely that the upstream portion of Yellowhawk Creek would meet the 20 cfs criteria. Therefore, it is assumed that flow in Yellowhawk Creek exceeds the 20 cfs threshold via a contributing tributary. Cottonwood Creek appears to be the largest contributing basin and therefore is a logical point at which Yellowhawk Creek likely exceeds 20 cfs mean annual flow.



Figure 6: Yellowhawk Creek looking upstream (east) towards confluence with Cottonwood Creek.

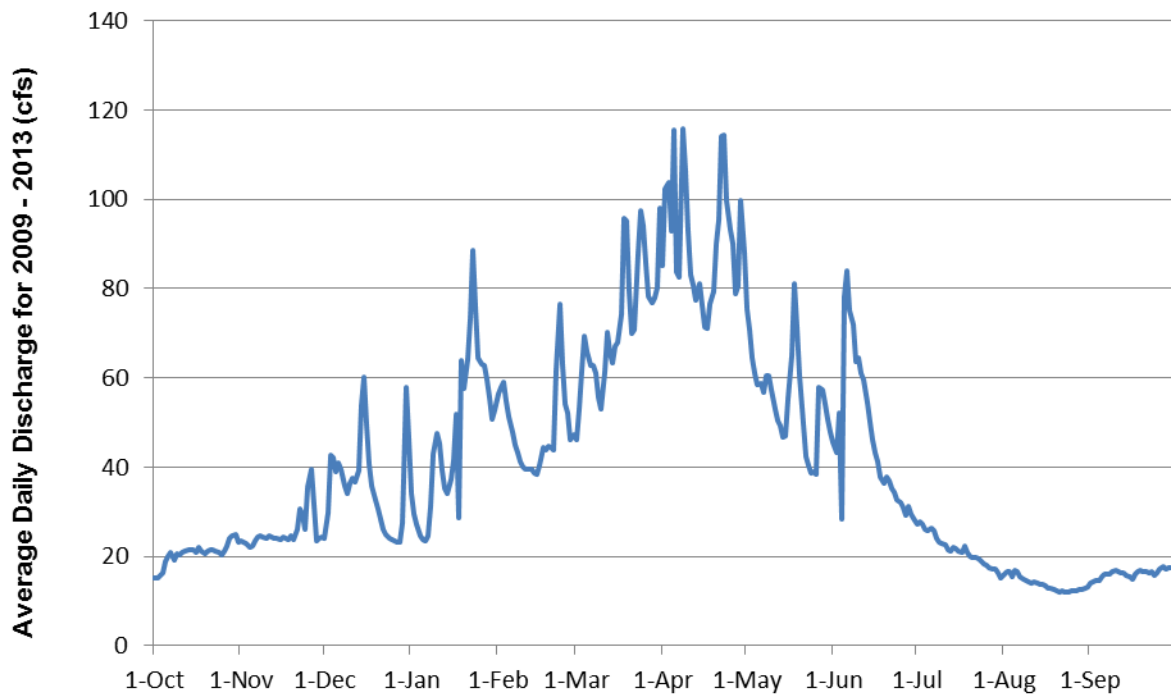


Figure 7: Yellowhawk Creek average daily discharge (cfs) near mouth.

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In summary, it is unlikely that Whetstone Hollow Creek or Coppei Creek meet the Washington State standards to be considered as Shorelines of the State. Conversely, it appears that Yellowhawk Creek, between its mouth and the confluence with Cottonwood Creek, may meet these standards and could be considered as a Shoreline of the State.

All of these considerations should be approved by the Washington Department of Ecology and the affected local jurisdictions involved with the regional Shoreline Master Program update.

Please call if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dan Nickel", with a long horizontal flourish extending to the right.

Dan Nickel  
Environmental Engineer