



and Associates

PLANNING, LAND USE
AND DEVELOPMENT SERVICES

Memorandum

Date: July 14, 2014
To: Project Management Team, Shoreline Master Program Updates
From: Bill Stalzer, SMP Project Team Leader
Re: Whetstone Hollow Creek and Dry Creek SMP Jurisdiction

The purpose of the special meeting on July 15th is to discuss the possible removal of Whetstone Hollow Creek and Dry Creek from SMP jurisdiction based on new information received within the past two weeks.

Whetstone Hollow Creek

As discussed at previous meetings, the Department of Ecology agreed to run a computer model analysis of the mean annual flow for Whetstone Hollow Creek by the end of June due to questions raised by the project management team and some members of the regional working group as far back as last fall about Ecology's designation of Whetstone Hollow Creek as a SMP jurisdiction stream.

On July 1st, I received the attached memo from Jaime Short of Ecology regarding the SMP jurisdiction evaluation for Whetstone Hollow Creek. The memo leaves the SMP jurisdiction decision up to the county.

After reviewing the memo and subsequently discussing it extensively with both Jaime Short and Dan Nickel, I believe Whetstone Hollow Creek should be removed from SMP jurisdiction for the following reasons:

- Ecology's July 1st memo includes precipitation data from 1970-2000 which is more recent than the precipitation data from 1930-1957 that is used in the computer model analysis prepared by the US Geological Service (USGS) in 2003 that is the current basis for the designation of Whetstone Hollow Creek as an SMP stream (the 2003 USGS model is the current one used by Ecology to determine SMP jurisdiction rivers and stream under the Shoreline Management Act). The 2003 USGS model analysis uses an average precipitation value of 20 inches per year. The Ecology memo uses more recent average precipitation values of 16.4 and 18.6 inches per year.
- Using the same regression equations used in the 2003 USGS computer analysis, Ecology ran two scenarios using the more recent precipitation data from two different, but relevant, sources. In each case the resulting mean average flow for Whetstone Hollow Creek was below 20 cfs at the current SMP point (approximately 3 miles upstream from its confluence with the Touchet River) and at the confluence point.
- As noted in the attached email from Dan Nickel of The Watershed Company, Mr. Larry Hooker of the Walla Walla County Conservation District, who has over 30 years experience in the Walla Walla area, indicated that the Conservation District has relevant annual precipitation data that ranges from 14 to 18 inches a year for this area of Whetstone Hollow Creek and that 16 inches a year would be an appropriate average value.
- Agriculture is the exclusive use and zoning along the SMP portion of Whetstone Hollow Creek and areas to the north, east and west. There are no plans to change the current Primary Agriculture 40 acre zoning.
- The City of Prescott and a portion of its UGA are located to the south. Based on population projections and existing land capacity, the City of Prescott will not need to expand its UGA for the next 20 years.

Dry Creek

As I mentioned at the June PMT meeting, some members of the Regional Working Group raised questions about the designation of Dry Creek as an SMP stream during one of the meetings discussing the preliminary draft shoreline inventory analysis. The basis of the SMP designation of Dry Creek is USGS gage data from 1949-1967 indicating a mean annual flow of 22.3 cfs and subsequent USGS 2003 computer modeling. Some members felt that farming practices changes since the 1970s and CREP plantings have reduced the flows today and asked that research be done to see if there is more recent data.

In subsequent discussions with Jaime Short, she said that Ecology operated a gage in Dry Creek at Highway 125 from 2002-2009 and that the mean average flow for the period was 18.6 cfs. In the attached email of July 11, 2014, Dan Nickel of The Watershed Company states that it is his opinion that there is a "high likelihood that the mean annual flow value is lower than 18.6 cfs" and summarizes the reasons for reaching this conclusion.

After the June Project Management Team meeting I contacted Steve Martin of the Snake River Salmon Recovery Board, Mark Grandstaff of WDFW, and Jed Volkman of the Confederated Tribes of the Umatilla Indian Reservation regarding Dry Creek. None of them were aware of any other extended period of annual flow data for Dry Creek (WDFW staff said they had some spot flow measurements from past years mostly above Dixie and are conducting more this summer and fall at Highway 12 just below Dixie.)

On July 9, 2014 I contacted Larry Hooker of the Walla Walla County Conservation District regarding changes in farming practices and the CREP along Dry Creek. Mr. Hooker corroborated that there has been a substantial increase in no-till farming along Dry Creek, which is also noted in the Walla Walla Watershed Management Plan (p. 4-23). Mr. Hooker also cited available data that there are 562 acres of CREP along Dry Creek which is equivalent to about 30 stream bank miles of the approximately 53 stream bank miles in Dry Creek SMP jurisdiction. Planting in riparian areas total 313,755 native trees and shrubs, most of which have been planted since 2000. Additionally, there is approximately 1 mile of livestock exclusion fencing along the creek. He stated that these combined efforts have reduced surface flows and improved water quality in Dry Creek, and it is his opinion that flows in the creek do not exceed a mean annual flow of 20 cfs.

Today I contacted Mitch Wallace, Hydrologist in the Spokane office of Ecology regarding flows in Dry Creek. Mr. Wallace operates Ecology's stream gages in the Walla Walla area and stated that he had collected some discrete point flow data indicating that flows for Dry Creek near Lowden were lower than at Highway 125, but there was no extended period of gage data in that area of the creek. However, he did say that it was his opinion based on the Ecology 2002-2009 gage data and his familiarity with conditions in and along Dry Creek that mean annual flows do not exceed 20 cfs.

As is true for Whetstone Hollow Creek, agriculture is the existing and planned future use along Dry Creek:

- Agriculture is the exclusive use and zoning along the entire length of Dry Creek and surrounding areas. The zoning is 40 acres except for some 10 acre agricultural zoning around Lowden. There are no plans to change the existing uses or zoning in the county's comprehensive plan.
- Based on county population projections and existing land capacity, there is no need for additional residential, commercial, or industrial land in the Dry Creek area for the next 20 years.

Recommendation

Based on the above information my recommendation is that the project management team request removal of both Whetstone Hollow Creek and Dry Creek from SMP jurisdiction.

Attachments:

- July 1, 2014 Memo re SMP Jurisdiction determination request for Whetstone Hollow, Walla Walla County, to Jaime Short, Shoreline Planner, SEA ERO Jaime Short, Shoreline Planner, SEA, ERO from Patricia L. Olson, Senior Hydrogeologist, SEA, HQ
- July 11, 2014 Email regarding Whetstone Hollow and Dry Creek to Bill Stalzer from Dan Nickel, The Watershed Company