Hanford Reach Working Group Statement of Agreement on the 2011 Initiation of Spawning

Submitted to Hanford Reach Working Group: <u>January 18, 2012</u>	
Approved by Hanford Reach Working Group::February 02, 2012	

Statement:

The Hanford Reach Working Group (HRWG) and Monitoring Team agrees the Initiation of Spawning was October 19th during 2011.

Background:

The Hanford Reach Fall Chinook Protection Program Agreement (HRFCPPA) established a Vernita Bar redd monitoring team consisting of representatives from the Washington Department of Fish & Wildlife (WDFW), Public Utility District No.2 of Grant County (GCPUD) and the Fisheries Agencies and Tribes (HRFCPPA Section C.6.a). Activities of the Monitoring Team include determination of the dates of; Initiation of Spawning, End of Spawning, Hatching, Emergence, the End of the Emergence Period, and the End of the Rearing Period.

During 23 years of protections under the Vernita Bar Settlement and HRFCPP agreements, the Initiation of Spawning has begun as early as October 18 and as late as November 1. A Statement of Agreement (SOA 2007-HR04) was approved by the HRWG during 2007 to clarify language in the HRFCPPA and establish protocol for using aerial surveys to determine the Initiation of Spawning. Under the SOA, an aerial survey that identifies five or more redds throughout the Hanford Reach may be used to determine the Initiation of Spawning. Prior to 2005, only ground surveys on Vernita Bar were used to determine the Initiation of Spawning.

A total of nine redds (five near Vernita Bar) were observed throughout the Hanford Reach during the aerial survey on October 16, 2011. This survey could be used to establish the Initiation of Spawning as October 12th, however, it would be 14 days earlier than the initiation date from ground surveys and six days earlier than the earliest initiation date during the previous 23 years. If the current protocol of using aerial surveys were applied to all years, October 12th is still one week earlier than the mean initiation date and is equal to the lower 5th percentile (Figure 1). During the second aerial survey on October 23rd, a total of 67 redds (23 near Vernita Bar) were counted throughout the Hanford Reach.

Given the low number of redds observed on the first survey and the relatively low number of redds that were constructed during the following week, the HRWG and Monitoring Team determined the Initiation of Spawning would be October 19, 2011. This date is equal to the mean Initiation of Spawning if aerial surveys were used to determine the initiation during all years (Figure 1).

HRFCPP Spawning Period 2011 Adjusted 2011 Current

Figure 1 Julian dates for the Initiation and End of Spawning in the Hanford Reach under the Hanford Reach Fall Chinook Protection Program (1988-2011). The boxes represent the 25th to 75th percentiles and the black circles represent the 5th and 95th percentiles. The pink circles represent the dates during 2011 and the blue diamond represents the adjusted Initiation of Spawning for 2011 in the zone below 36 kcfs elevation.

> 50 kcfs

End

36-50 kcfs

Start

< 36 kcfs

340

330

320

310

300

290

280