WATERSHED

Science & Engineering Inc.

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October 18, 2011

Mr. Michael Wagar
Executive Editor
The Chronicle
321 N. Pearl St.
Centralia, WA 98531

Re: Chehalis River Basin Flooding and Water Retention

Dear Mr. Wagar:

I am compelled to write this letter to clarify and correct statements attributed to me in several recent publications by the Chronicle. The Chronicle's October 8, 2011 article entiltled "**Chehalis Flood Control: A Tale of Two Solutions**" stated "According to Flood Authority consulting hydrologist Larry Karpack, the 80,000 acre/feet of water a retention dam could hold back would have prevented the devastation of the 2007 flood". Similarly, the Chronicle's October 11, 2011 editorial entitled "**Water Retention Is Best Use of Scarce Dollars**" stated "That contention was backed up by hydrologist Larry Karpack, a consultant to the Flood Authority. Karpack contends the water retention structure would have held back 80,000 acre/feet of water which in turn would have prevented the widespread flooding" referring to Don Koidahl's belief that the water retention facilities might have prevented "damage to his store and the rest of the basin – with estimates in the $1 billion range in damage". In reality what I believe I said was that if the proposed retention facility on the Upper Chehalis River had been in place at the time of the December 2007 flood, the flooding along the Chehalis River would have been reduced, in particular in the upper reaches of the river.

The December 2007 storm event was centered in the Willapa Hills and included unprecedented amounts of rainfall. The resultant flood flows, as observed at the USGS gages on the Chehalis River near Doty and on the South Fork Chehalis River, were also unprecedented. Previous analyses have shown that the proposed retention facility on the Chehalis River upstream of Pe Ell could have captured all runoff originating in the basin upstream of the dam site. This would have greatly reduced the flows in the river at Doty and would therefore have reduced the potential for flood damages. Previous analyses also showed that the retention facility would have resulted in a significant reduction in flood water levels as far downstream as Centralia and beyond. However, as one gets further from the proposed facility, the potential benefit is lessened. Thus I would not, and did not, say that the proposed facility would have "prevented widespread flooding" or entirely eliminated flood damages in the basin.

I thank you for the opportunity to clarify the facts and my opinions regarding flood relief in the Chehalis River basin. I think that it is important for the public to accurately understand what flood relief alternatives can and cannot do such that good public policy decisions can be made in the future. As such I would appreciate you considering printing a correction to your previous reporting of my opinions regarding the December 2007 flood and the proposed retention facility.

If I can provide you with further clarification, please feel free to call me at (206) 521-3000.

Very truly yours,
WATERSHED Science & Engineering, Inc.

Larry M Karpack, P.E.
Principal Hydrologist

Cc: Vickie Raines, Chair, Chehalis Basin Flood Authority
Lee Hughes, Reporter, The Chronicle
Lara Fowler, Coordinator, Chehalis River Basin Flood Authority
Greg Hueckel, SBGH-Partners