

KITTITAS COUNTY DEPARTMENT OF PUBLIC WORKS

Kirk Holmes, Director

December 12, 2011

Neil Caulkins, Deputy Civil Prosecutor
Kittitas County Prosecuting Attorney Office
205 W. 5th Rm. #213
Ellensburg, WA 98926

RE: Claim for Damages: Wade and Lisa Young - 6151 Cove Road

Dear Mr. Caulkins,

Our office has reviewed the "Claim for Damages" submitted by Wade and Lisa Young which states that "failure to remove bed load caused diversion of creek channel to 6151 Cove Road", caused significant flood losses to the Young's property. After researching this claim with the assistance of the County Road Engineer and preliminary analysis conducted by Watershed Sciences & Engineering Company, a recommendation of denial is forwarded.

It should be noted that a full report of the event, including pre and post-flood analysis is expected to be delivered to the county by December 23, 2011 by Watershed Sciences & Engineering. This engineering report is being conducted in an effort to better understand the impacts of May 14-17, 2011 flood event and the impacts to the regulated floodplain by the placement of a large berm located on the north side of Manastash Creek. It is expected that the County Public Works Department will provide for the removal of all or a portion of this restriction to the regulated floodplain based on the recommendations of the analysis.

Based upon our historical maintenance knowledge of the site and preliminary findings of Watershed Science & Engineering, the following information supports the denial:

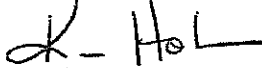
1. The transported and deposited bed load of Manastash Creek in this area is a natural chronic problem and will be a hazard in perpetuity. The primary problem is that the slope of this reach of Manastash Creek is slightly flatter than the overall slope of the stream. This flattening causes bed load to be dropped or deposited within a 1000-foot long reach of the stream that begins 600 to 700 feet downstream from the bridge and extends 300 to 400 feet upstream. It tends to be large floods that carry and deposit most of the sediment. We know that significant accumulations occurred during the February 1996 flood as well as the May 2011 flood; both times the channel within this reach had to be dredged to restore capacity to the channel. So, in summary, it is clear that the primary cause of the channel capacity problems in the vicinity of the Cove Road Bridge are the result of natural stream related processes rather than the bridge. It is also clear that to maintain capacity within this reach of the channel requires periodic dredging that extends far beyond the County's Road right-of-way, and therefore, beyond our authority. Another way to look at this is that dredging at the bridge or within our right-of-way would do little to alleviate the problem.

2. Within this 1000 foot long reach of Manastash Creek, Watershed Science & Engineering has estimated that approximately 1300 cubic yards of sediment was deposited during the course of the May 2011, flood. Looking at this another way, the elevation of the stream bed rose an average of 1.5 to 2.0 feet along the majority of the 1000-foot long reach during the event. The group of excavators that dredged the channel on May 16, 2011 removed approximately 2100 cubic yards of material from the channel which has helped to restore some channel capacity. I point this out to demonstrate that the scale of the sediment deposition problems in the vicinity of the Cove Road Bridge are far greater than anything that could be related to the bridge and road alone.
3. The primary source of water that flowed across the Young's property left the channel 200 to 400 feet upstream from the Cove Road Bridge. This was not related to the bridge or road (i.e. the primary source of water was not the result of water ponding or backing up against the bridge or road).
4. We do agree that the bridge deck and girders did obstruct flow to a limited extent during the flood as the opening under the bridge got smaller due to sediment deposition within the channel. In addition, following the event, we noticed that a tree root had lodged itself under the bridge sometime during the flood. Watershed Science & Engineering has estimated that at worst this may have caused the water level to rise 1.5 to 2 feet at the upstream side of the bridge when compared to what would have occurred if the road and bridge did not exist. Due to the steep slope of the stream the effect of this elevated water level would have extended no more than 100 feet upstream from the bridge. This would have had little impact on the Young's property because there was a low berm along much of their bank that would have prevented a significant amount of flow from leaving the channel. To reiterate, most of the water that flowed across their property left the stream well upstream from the bridge and was not associated with the impact of the bridge described above.
5. Based on county bridge inspection records, the cross sectional reports associated with our annual records do not show a measurable loss of flow capacities. Our files do not show a regular sediment removal program for any structures on Cove Road or countywide. That said, as noted above we do know that this reach of Manastash Creek partially filled with sediment during the 1996 flood. Following that event, some deposited materials were removed from the channel both downstream and upstream from the bridge. It is unclear in our records if the county or private property owners led that effort. This is further evidence that the sediment deposition problem is a reach wide problem that is driven by factors that are not directly related to the Cove Road Bridge.
6. The subject property is located in a high flood hazard area which has been historically prone to flooding. A 1954 historical aerial photograph of the area shows that a branch of the stream once passed diagonally through a portion of the subject property as well as the property immediately to the west. This channel was obliterated by the farmer that once plowed the area, but it is clear that the natural drainage route for flows that leave the channel is along this same path. Original improvements to the property date back to 1974, prior to the county's adoption of the current flood hazard elimination code. Under current code, the structure would be required to be constructed to 1-foot above the base flood elevation.

I am confident that Watershed Science & Engineering's analysis and report will help everyone involved in this unfortunate situation to gain a much better understanding of the factors that contributed to the May 2011 flooding in the vicinity of Cove Road. Once these factors have been identified, then we can collectively work toward a long-term solution.

If you have any questions or comments, please do not hesitate to contact my office.

Sincerely,

A handwritten signature in black ink, appearing to read 'K. Holmes'.

Kirk Holmes
Director of Public Works

Cc: Doug D'Hondt
Christina Wollman
File

KH:kjc