

## **Yellow Creek- Humbug Valley Fish Survey Synopsis**

**5/2/2013**

The Yellow Creek in Humbug Valley fish survey was conducted on May 2, 2013 with one observer, Jim Wilcox. The survey began at 0945 hours at the box culvert on County Road 307. Water temperature at start was 7<sup>0</sup> C. The survey length was approximately 1.0 miles. The survey was completed at 1118, with a water temperature of 10.0<sup>0</sup> C. Water clarity was excellent except for very deep pools with streamflow approximately 15- 20 cfs. Streamflow is perennial. Representative photos are below. The Yellow Creek channel is downcut through most of the survey length terminating is a series of headcuts near the upstream end of the reach. Upstream of the headcuts Yellow Creek occupies one or more narrow, deep, well vegetated channels. Three (3) rainbow trout were observed. No redds were observed. One rainbow trout (7") was observed downstream of the headcuts at approximately the mid-point of the survey reach. The remaining two rainbow trout (5" & 4") were observed upstream of the principal headcuts.

Generally, the Yellow Creek channel between the county road and the headcuts is developing a consistent morphometry except at the frequent, high eroding banks. Yellow Creek was subject to a large flood in early December, 2012. There was good evidence of a 3 to 4 foot loss on these banks through the reach related to this flood event. This was discernible due to the extensive design flagging that was installed in the summer of 2012, which is now frequently located in large sod chunks in the channel. Most riffles have a coarse, cobbly armor layer and are generally cemented with fine sediment. A few pools have clean gravels in the pool tails. Numerous pools, however, have abundant silt deposits throughout. Channel incision at, and above, the principal headcuts is accelerating with a rapidly widening the channel.



**Figure 1. Yellow Creek looking upstream from County Road 307.**



**Figure 2. Yellow Creek typical between county road and headcuts.**



**Figure 3. Yellow Creek typical bank erosion.**



**Figure 4. Yellow Creek typical immediately below headcut.**



**Figure 5. Yellow Creek principal headcut.**



**Figure 6. Yellow Creek incising above headcut.**



**Figure 7. Yellow Creek typical without incision.**