

From: Richardson, Mary [mary_richardson@fws.gov]
Sent: Tuesday, September 17, 2013 3:01 PM
To: Tony Robinson
Cc: Robert Clarkson; Clayton Crowder
Subject: Re: Questions About Muleshoe and GPS Unit
Tony:

I see that you answered the GPS question in a previous email, so I won't address that here.

As far as overall observations, there was water where we first hiked down (which fell within the 2nd random transect). But, it was very shallow and wide, and above the upstream end of the transect, it continued to become moreso, with shallow pools connected by limited flow in between. There was some evidence of flooding throughout the reach. I saw some debris flows as high as about 1 1/2 feet up the bases of trees. Banks were fairly clean with limited tracks, etc. Grasses and vegetation on some of the banks outside the active channel were flattened in the direction of the stream, and some of those plants were three foot tall or so, and were still laying down. In several places, sand and small woody debris had been deposited up on the banks outside of the active channel as well, in some instances on top of flattened vegetation. There were several areas outside the active channel with large amounts of silt deposits. Within our transects, the stream braided out to three channels at one side (two active, one backwater), and two places in at least one other, which may have been influenced by sediment deposition in recent flows. Generally, the active channel was as I remembered it from previous trips, without significant lateral movement in the floodplain.

Glad we recorded the data you needed, albeit not maybe in the right places. Let me know if you have any questions as you work through it.

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On Tue, Sep 17, 2013 at 2:25 PM, Tony Robinson <TRobinson@azgfd.gov> wrote:

Mary and Rob,

Thank for helping out with the Hot Springs Canyon monitoring. I realize that I should have explained more of the protocol and the data sheets to you, and I forgot to tell you to record the habitat information on the habitat data sheet. But luckily you remembered to record substrate on the fish collections data sheets, so I was able to reconstruct the data and fill out the information on the habitat data sheet. For the most part the data sheets were filled out correctly, except sometimes the Reach, transect, and site fields were not always. But it was not big deal because I was easily able to correct it with the information that was recorded. So, in the end, all of the data was there, which is a good thing.

Looks like the catch was relatively low in your reach, and in Reach 3 (down in the narrows), but we had good catch rates in the middle reach. How did the Reach 1 look? Was there water all the way down from where you first hiked to the stream? Or was the upper portion dry? Did you notice much flood effects? Looks like I should have taken most of the vials, as most chub (45) were captured in Reach 2. But Clay did collect samples from all 10 he collected, and we also collected samples.

Question. I did not see the gear that you left for us; Clay did and put it in the truck. Clay is in today; but I cannot seem to find

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the GPS unit that I gave you guys to use, and Drew did not find it when he looked (he is gone now too). So I just wanted to check to see if one of you has it.

Anthony Robinson

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'Nothing in biology makes sense except in the light of evolution.' Theodosius Dobzhansky

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