

**From:** Mike Suflita  
**To:** Chris Hansen  
**Date:** 7/25/02 3:14PM  
**Subject:** Work Plan from Earthfax

Chris,

Below are the Division comments regarding the Work Plan to Evaluate Mine-Water Discharge Impacts on Eccles Creel and Mud Creek received by the Division on July 8, 2002. The Work Plan paragraph numbers are followed by the paragraph number of our notes of the planning meetings we held to develop the plan.

### WP 2.1/ Notes 1

This section looks fine, except for missing details that were, and still are, required. Specifically, the third bullet paragraph speaks only of the "longitudinal profile of the stream" without details. As noted in Harrelson, et. al., pages 37 to 41, the profile needs to conform to the following:

== The profile will extend for 20 times the stream width at every reference site. Half the profile would be above the site and the other half would be below the site. The cross-section at the site would then be done at the mid-point of the profile.

== Profile elevations would be taken approximately every full-bank channel width along the centerline of the stream. Stream bottom pools and riffles would be shown in the profile.

== The profile will include the stream bottom elevation, the water surface, and the bank elevation along the profile.

### WP 2.2/ Notes 3

You've done too much here. We are expecting the Depth to Groundwater ONLY along Mud Creek and not along Eccles Creek. Thus, sites M-1 through M-5 would be the ones to have the piezometers installed perpendicular to the stream. Once again some detail is required. We discussed and agreed to two piezometers on both sides of the stream ( total of 4) at each of those sites. That way one can plot the water surface elevation and the groundwater elevation, along with the ground surface, for some distance away from the stream. The depth to water of the first piezometer will determine the distance to the next piezometer, depending on whether it's a gaining or losing stream reach.

### WP2.3 / Notes 4

This looks fine. One comment is those files are available on the Internet at the USGS site and I think they can be downloaded.

### WP 2.4 / Notes 6

This looks fine. I've found the USGS Internet site has photographs of Mud Creek where we are interested, so you might check there.

**WP 2.5 / Notes 7**

This looks fine.

**WP 2.6 /Notes 8**

THis looks fine. Thank you.

**WP 2.7 / Notes 7**

THis looks fine, except we agreed the flow and water-quality data would be collected whenever there was an increase of 25 % in addition to the other four times per year.

Finally, there is an omission. Item 5 in our meeting notes states: " Look for past studies of Mud Crek and Eccles Creek done by Utah State Agencies (eg DEQ) and Federal Agencies (eg USGS). DOGM will provide two known studies." I sent you those two studies, but you still need to look for the other ones which may have been done.

Susan and Priscilla are still reviewing the revised plan Patrick Collins sent with the Work Plan.

Would you please redo the Work Plan and include the items described above? Then send us the plan. Thanks.

Mike

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CC: Gregg Galecki; Priscilla Burton; Susan White; Wayne Western