



Calapooia Watershed Council

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Mission: Providing opportunities for membership to cooperate in promoting and sustaining the health of the watershed and its communities.

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UPDATE

Brownsville Dam Pre-implementation Data Collection

On Monday, August 28, 2006, Denise met with 2 scientists from Northwest Geophysical Associates, Inc (NGA) of Corvallis. The meeting took place at the Brownsville Dam. The purpose was to determine the appropriate method for assessing the underlying geology at the Brownsville Dam and above the dam. This data can be used to determine the volume of stored sediment behind the dam. Janet Corsale, Inter-fluve engineer, recommended this firm and spoke with them on the phone prior to Denise meeting with them in the field. Janet told the firm we were interested in the geology directly beneath the dam since there is some concern that the dam is not built on bedrock. Denise thought we would contract with this firm to determine the sediment stored above the dam. Denise will talk with Janet to understand what data Janet thinks we need.

NGA will put together a proposal for a full day of field work at the site and make an estimate on how many transects they will be able to collect during that day. We can collect one day's worth of data, see what the results look like and determine from there if we want to move forward with further data collection upstream to the tailout of the stored sediment. There is no mobilization/demobilization cost for NGA and their travel costs are minimal since they are based out of Corvallis. NGA thought this would be the most cost-effective way for us to proceed and would provide the opportunity to assess whether the information being collected was going to tell us what we need to know. They propose to use seismic refraction to determine the depth to bedrock. However, there are limitations to the method based on the composition of the stored sediment. If it is mostly gravels and cobbles, the sound waves will respond more predictably. If there is clay or fines, the results will be less accurate. We believe the stored sediment is composed of mostly gravels and cobbles.

NGA said it will be difficult to determine the depth to bedrock beneath the dam because of the dam's construction. Since the dam is not solid concrete, but rather filled with some undetermined material, the seismic refraction method will not work. Additionally the boulders placed on the downstream side of the dam will interfere with measurements on that side. NGA proposed working upstream of the dam.

NGA would prefer to work at the site with the flashboards removed. Denise checked with Bill Nelson, Vice President of the Brownsville Canal Company, and the boards aren't scheduled to be removed until October 15th. They could be removed the weekend of September 30th at the earliest because Bill is going out of town and doesn't return until September 25th. Bill thinks maybe John Holbrook could coordinate the removal if it were critical that we get them out earlier, but Bill doesn't think many people would show up.

Next Steps

- Denise will contact Janet to make sure we are on the same page about what data needs are for the site.
- Denise will request that Inter-fluve provide the electronic files from the March 2005 site survey to NGA
- NGA will have a proposal to Denise by the end of the week that outlines what data will be collected, method used and cost.
- Denise will provide NGA's proposal to Janet Corsale, Inter-fluve; Douglass Fitting, OWEB; Karen Strohmeier NRCS; and members of the Calapooia Watershed Council for review.
- Denise will provide NGA's proposal to OWEB to secure funding.
- Denise will provide NGA's final scope of work to Cascade Pacific for contract preparation.
- Denise will stay in contact with the Brownsville Canal Company about when the dam's boards need to be removed.