Subject: another try at sending our project proposal Date: Mon, 22 Oct 2001 16:09:16 -0400 (EDT) From: jjanow@zoo.uvm.edu To: pbierman@zoo.uvm.edu

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Objective:

To measure the volume of a debris fan near the Trout Club at Lake Mansfield in Stowe, Vermont. We will map out the shape of the fan and trace the streambed in order to find the source of boulders and evidence of where the debris flow potentially began.

## Methods:

We will use survey equipment to determine the parameters of the fan. We will calculate the slope of the fan and use simple trigonometry and mathematical equations to find the volume of the sediment load. We will also measure the diameter of boulders found in the area to give us an idea of the velocity of the debris flow. We will look for outcrops or cliffs of sediment that compares to the boulders found on the fan. Tree cores will be taken to date the vegetation in order to calculate a relative age of the fan. We will hike up along the streambed and take a slope for numerous cross sections to determine if the slope is steep enough for a debris flow. We will reference topographic maps to plot our location.

## Significance:

To compare the sediment load of the Trout Club fan and the Miller Brook fan because these two fans are located in relatively the same area. Also to evaluate the impact on humans if there were another debris flow such as boulders blocking the road.