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Organization:

Title:

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Subject:

Chris Strebig,

I am unable to use the links to submit comments on the Tunnel Repair/Spirit Lake outlet study, so I'm addressing them to you.

I'm expressing my support for developing a permanent, sustainable solution to the issue of the outlet to Spirit Lake. I attended the presentations in Kelso in the fall of 2016 to provide the background of the issue. The two most viable options were to continue to maintain the tunnel, or to create a surface exit across the debris flow.

It's clear the tunnel has serious issues. It crosses at least one shear zone which means there WILL be displacements that will interfere with capacity, even potentially blocking it. The first blockage was cleared by dangerous, expensive work inside the tunnel, while the lake level was allowed to rise, since there was no functional outlet. This issue will recur repeatedly for as long as the tunnel is in service. Sooner or later, the Forest Service will be unable to afford the repairs. Or something will go wrong with repairs that will require a longer work schedule than the safe freeboard of the lake allows for. Then what?

One repair needed now is to the inlet. This is also vulnerable to plugging and that will also lead to raising the level of the lake. Again, repair requires planning, money, and access during weather that allows the work.

I don't know of another lake of similar size and with similar potential of downstream effects that is served by this type of outlet. It doesn't inspire confidence.

The other option is surface drainage. This option has been successfully used on Coldwater Lake and Castle Lake, with some engineered assistance (such as impermeable lining in portions of the channel)

The potential issue is that we don't know if the top layer of debris is subject to catastrophic erosion. We need to know its thickness and compaction to assess that danger and create a design. Ditto the Landslide lower level, which is expected to be fairly stable, well compacted and of larger sized rocks.

The conclusion of the discussions I heard in 2016 is that this information is required to assess this option. This can only be obtained onsite. We know no more now than we did in 2016. This is viable, important research. It affects public safety, restoration of fish runs, the health of the Toutle drainage, as well as adding to our understanding of volcanic processes. It needs to be done.

This research is as important and worthy of scientific curiosity as well as practical use as any that has been going on for 40 years. This research requires the use of a drill rig. The drill rig requires practical road access. It should be built.

I think it is tremendously ironic that, when mining interests wanted access for exploratory drilling on the headwaters of the Green River, the only significant drainage in the Monument spared major damage, they were granted the right to build a road. Surely this is more important than that need, and the risk of environmental damage much less.

A panel of scientists with support from public input agreed about three years ago that this data should be acquired. The only practical way is to build a road and get on with it.

Pat Dick

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