ATTACHMENT F

Dennis Aguirre

From: Charlie Kissick <sigmaprm@pacbell.net>
Sent: Tuesday, May 03, 2016 11:56 AM
To: Dennis Aguirre
Subject: RE: PLN2015-00152Miramar
Attachments: Rational Method - Runoff.pdf

Hello Dennis,

Abbie asked me to make an estimate of the effect of a dam failure during a 100-year storm.

I estimate the volume of the reservoir to be 2 acre-feet. I estimate the area of the watershed to be about 800 acres. At first glance, the volume of the reservoir appears to be negligible, compared to the size of the watershed. To get the most accurate estimate of the impact of a dam failure, a computer model would have to be used. We do not perform such analyses, however I made a rough estimate of the impact, using the Rational Method.

To get a rough estimate, I added the equivalent area that the 2 acre-foot reservoir would be if it were spread out to become 0.81 inches deep, per the hourly rainfall intensity of a 100-year storm. Therefore, the 800 acre watershed becomes the equivalent of 829 acres. This increase in area results in an increase in runoff from 194.4 ft^3/sec to 201.4 ft^3/sec, or an increase of 3.6%.

This, to me, does represent a negligible impact. It should be noted that the peak flow during a 100-year storm is not likely to coincide with the peak flow resulting from a dam break. Therefore, the 3.6% increase is likely to flow at a time when the flow rate is less than the maximum flow rate during the design storm. The potential impact on the life and safety of people downstream is negligible.

See my calculations, attached. And keep in mind this is a rough estimate.

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From: Dennis Aguirre
Sent: Tuesday, May 3, 2016 10:10 AM
To: Ab Goldstein
Subject: PLN2015-00152Miramar

Hi Abbie,

Attaching your report and WRA's. Their comment is at the bottom of page 3. The question in the Initial Study is as follows: Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? Hope you can help me here.

Thanks,
Dennis