

Dave Boore's notes on the locations of strong-motion instruments at Anderson Dam and Cedar Springs Dam.

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Rob Kayen, in his 051130 Boore notes.pdf, notes the probable mislocations of the strong motion recorders at Anderson Dam and Cedar Springs Pumphouse (when in the field, he found no instrument at the coordinates he obtained from someone representing NGA). I have a few updates on this situation:

Anderson Dam downstream:

The downstream station is no longer in operation, according to this excerpt from an email from Ron Porcella:

"Chris: see attached PLGR coordinates below for Anderson Dam structure array, which Walt surveyed in Feb. 2003. He did not survey the Downstream station, which is no longer in operation-- but the most recent survey (prior to abandonment) put the Downstream SMA-1 at 37.165N and 121.631W."

And here are the PLGR results (PLGR is a GPS unit that was not subject to the noise that used to be added to GPS signals):

"I ran a GPS survey of Anderson Dam today using the PLGR I. The results are as follows:

Ch 1-3: toe 37.16553n, 121.63163w
elevation 440'

Ch 4-5: mid-dam, center 37.16557n, 121.63049w
elevation 531'

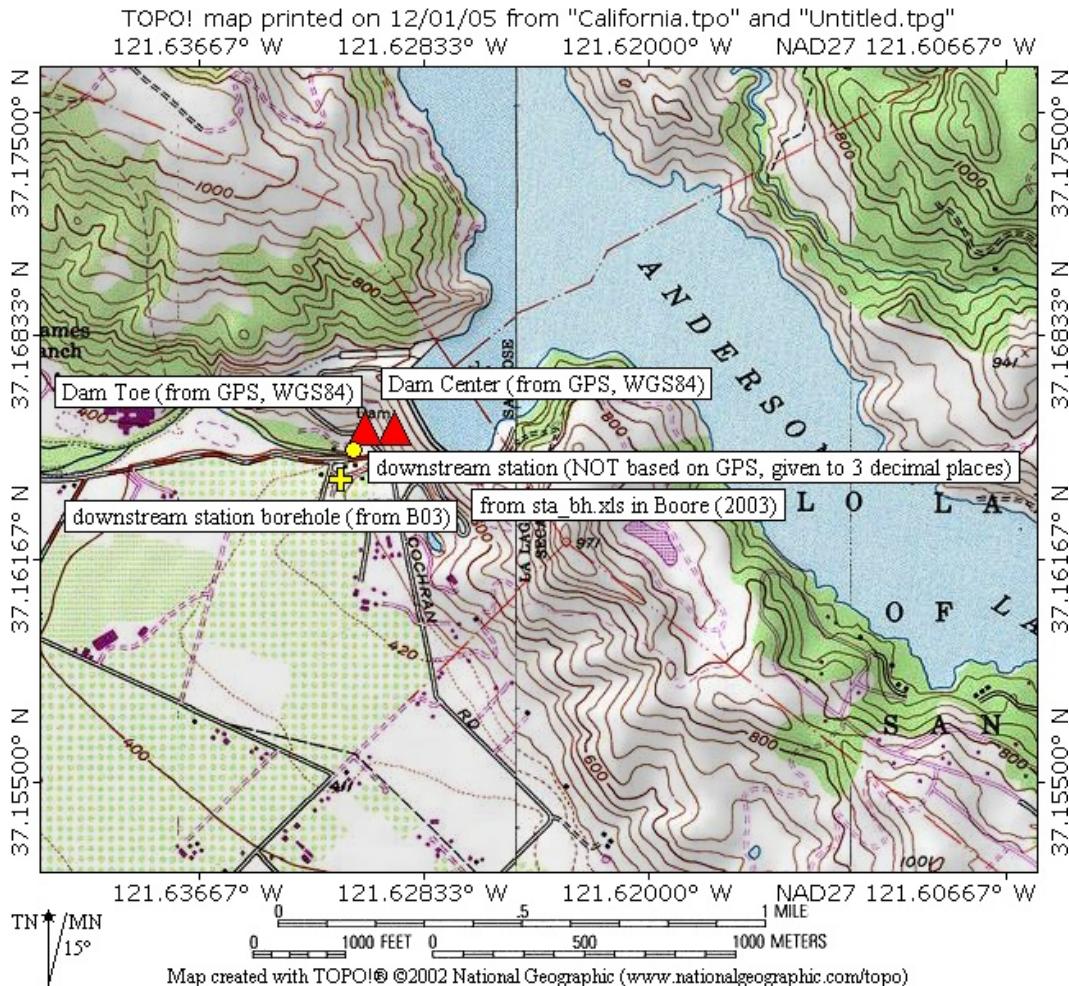
Ch 6: mid-dam, right 37.16617n, 121.63082w
elevation 529'

Ch 7-9: right crest 37.16649n, 121.63011w
elevation 628'

Ch 10-12: left crest 37.16589n, 121.62972w
elevation 625'

-Walt ="

I'm not sure why the location given to Rob was so poor, but I suspect it was rounded from the actual coordinates. I've asked Chris Stephens to have someone look at a map and provide coordinates of the downstream recorder to more than three decimal places. I've attached a figure showing some of the locations.



Cedar Springs Dam:

Here there is a possibility that the station that recorded the 1970 Lytle Creek earthquake was different than the one that recorded the 1971 San Fernando earthquake (I've asked Chris Stephens to look into this in detail). According to "United States Earthquakes 1970", the Lytle Creek earthquake was recorded at Cedar Springs, right abutment. The report "Strong-Motion Instrumental Data on the San Fernando Earthquake of Feb. 9, 1971", edited by D. Hudson, states that the instrument was located at the Cedar Springs Pump Plant (p. 33, p. 174) (but unfortunately, on the table of instruments in the accelerograph network on p. 8, Cedar Springs-Abutment is listed, just to confuse things, and in several other places the site is given simply as "Cedar Springs"). The location at

the Pump Plant is consistent with the text header in the time series file on Seekins's DDS-7 CD (called the "Pump House"). But the station coordinates in the CD file seem to have been rounded to two decimal places, which probably accounts for the location in a pasture. I have coordinates in my personal database that plot at a more reasonable location, as shown below.

