

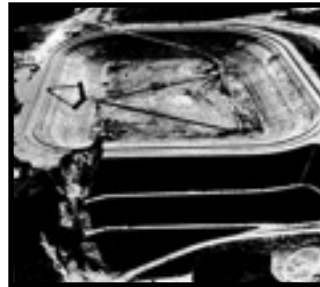
# LAM PRA PLERNG DAM LEFT ABUTMENT QUESTION

*Meeting RID 8 March 2012*

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Video introduction (unlisted Youtube video)

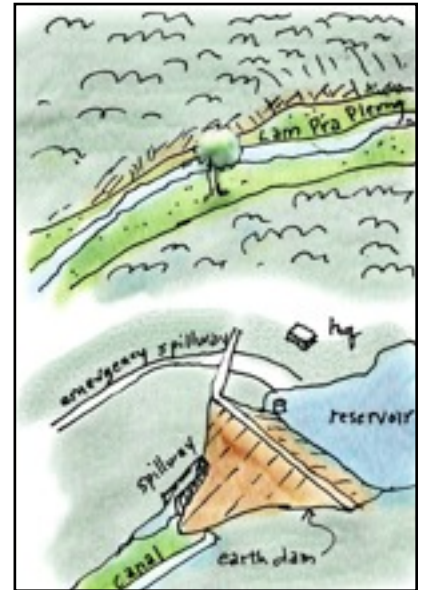
<http://www.youtube.com/watch?v=bl0BxVRs9Qw>



# LAM PRA PLERNG DESIGN/CONSTRUCTION PROBLEMS

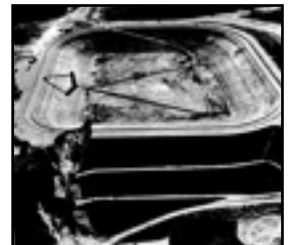
- hydrology:
  - only 5 year record
  - flood control “intangible”=”impossible to understand”??
- no equipment, rush schedule
- no deep foundation excavation
- earth fill materials
  - \*silty sand; is it enough?
  - dry/wet seasons: too much, too little
  - good compaction with new equipment
- leaky abutment
- piping danger from cracking

<http://www.uic.edu/classes/ceem/ceemlab/66-4-2007.pdf>



## OTHER EARTH DAMS

- BALDWIN HILLS COMPARE
  - <http://www.stanford.edu/~meehan/la/pubs/pubbaldw.pdf>
  - [http://en.wikipedia.org/wiki/Baldwin\\_Hills\\_Reservoir](http://en.wikipedia.org/wiki/Baldwin_Hills_Reservoir)



- TETON DAM COMPARE
  - [http://en.wikipedia.org/wiki/Teton\\_Dam#Cause\\_of\\_the\\_collapse](http://en.wikipedia.org/wiki/Teton_Dam#Cause_of_the_collapse)

\*\*Muhunthan, B., and Pillai, V. S. (2008). TETON DAM: Uncovering the Crucial Aspect of its Failure, Centennial Volume, *Civil Engineering*, Proceedings of the Institution of Civil Engineers, 161(11): 35-40.



# Suggestions for investigation and treatment

- cause of old failure
- survey/piezometer data
- check fill character
- inspection trench for crack detection
- evaluate abutment seepage