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Update on the Earthquake Bogey March 2016

I have written previously about the earthquake bogey¹ but while one of its prophets, Beau Goldie of the Santa Clara Valley Water District², has now bitten the dust, it still lives on. Whenever concerned Bay and Delta stakeholders argue that the project would not increase water supply and, by DWR and Reclamation's own admission, harms all the key fish species, the proponents respond that the California WaterFix is a great project because it improves export water supply reliability in an earthquake situation.

I am reluctant to confuse the argument with facts, but here are a couple of "observations" from someone who has a Ph.D. in geotechnical and earthquake engineering and has worked on major projects throughout California.

1. "The Big One", referred to by Beau Goldie in Footnote 2, is a term used to refer to a repeat of the 1906 earthquake on the San Andreas fault. Such an earthquake has a mean recurrence interval of 200-300 years, so that it is not necessarily imminent, but it will recur in due course and is a much greater threat to the dams of the Santa Clara Valley Water District which are close to the San Andreas fault than it is for the Delta Levee System, which is miles away.

2. For the truth about the Delta Levee System including its vulnerability to earthquakes, see Chapter 5 and Appendix E of the Economic Sustainability Plan of the Delta Protection Commission³. The risk of damage to the levee system from earthquakes is less than the risk of damage to the existing pumping plants and aqueducts which lie along the various segments of the Central Valley Coast Ranges thrust fault (on which the Coalinga earthquake occurred). That is what DWR, Reclamation, and the State and federal water contractors should be worried about.

¹ <http://FixCAWater.com> See parts 2, 4 and 6 of An Open letter on the California WaterFix.

² "Climate change threatens an extensive system of levees. Seismic damage to levees is better understood and the risks are great; if the big one hits, levees could fail, disrupting our water supply for weeks or months." Op-Ed in Mercury News by Beau Goldie, CEO of the Santa Clara Valley Water District.

³ <http://www.pacific.edu/Academics/Schools-and-Colleges/Eberhardt-School-of-Business/Centers-and-Institutes/Center-for-Business-and-Policy-Research.html>

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